



RESEARCH
PROGRAM ON
Agriculture for
Nutrition
and Health

LED BY IFPRI

Agriculture for Nutrition and Health

Capacity Development Strategy for Phase II
Zero Draft, Prepared August 2015

Table of Contents

Introduction.....	1
A4NH research program and implications for capacity development	1
Building capacity for agriculture, nutrition, and health research	1
Building capacity for development outcomes along A4NH impact pathways.....	2
<i>Capacity development in value chain impact pathways</i>	3
<i>Capacity development in program pathways</i>	4
<i>Capacity development in policy pathways</i>	4
Elements of capacity development	5
References	8

Introduction

The CGIAR Research Program (CRP) on Agriculture for Nutrition and Health (A4NH) focuses on nutrition and health outcomes resulting from deliberate changes to how agricultural research and development are conducted. This impact and outcome orientation of our research determines our programmatic approach, as described in our [results frameworks, impact pathways, and theories of change](#) (ToCs). In turn, the roles and priorities of capacity development in A4NH follow from the impact pathways, ToCs, and the essential role of partner capacity, particularly among national partners, if nutrition and health outcomes and impacts of research are to be realized. The [A4NH Partnership Strategy](#) describes the essential partners, at country, institutional and individual levels, in our impact pathways and ToCs, namely, researchers, development implementers, value chain actors, and policy and investment enablers.

This zero draft strategy begins by describing the main objectives of A4NH and their implications for capacity strengthening. For each of the major streams of capacity strengthening activities, we discuss lessons from Phase I and plans for Phase II, based on the proposed six flagship projects and one cross-cutting program on gender, equity and empowerment (see Table 1 for a summary). Attention is paid to how the activities relate to the CGIAR Capacity Development Community of Practice (CoP) draft capacity development guidelines for the 2nd round of CRPs. The strategy will be improved upon with more detail for the full proposal submission in 2016.

A4NH research program and implications for capacity development

The starting point for A4NH is that agricultural practices, interventions, and policies can be better adapted and redesigned to improve health and nutrition benefits and to reduce health risks. Agriculture will need to develop and expand to meet the food needs of a growing population from a finite resource base. How agriculture develops to meet this need will have real consequences for the health and nutrition of people. Thus, this research program works at the interface of the agriculture, nutrition, and health sectors to contribute to outcomes and impacts as described in the [results framework](#).

Another feature that shapes the A4NH approach to capacity development is the multi-sectoral nature of A4NH research. Most of our research requires data, metrics and approaches that account for different ways in which agriculture and health assess outcomes. For example, health analyses focus on disability-adjusted life years (DALYs) and cost-effectiveness, while agriculture is usually assessed by cost-benefit analyses. The implication is that innovative learning materials and approaches will be important for innovative metrics and methods to be used by both sectors.

In addition to its research agenda, as an integrative CRP (I-CRP), A4NH also has a role to play in strengthening capacity across CGIAR and adding value to others CRPs to enhance their contributions (and reduce risk of unintended negative consequences) to the System Level Outcomes (SLO) on *improved food and nutrition security for health*. This implies that there are two streams of capacity building work in A4NH: (1) building capacity to do agriculture, nutrition and health (ANH) research, especially within CGIAR and 2) building capacity to support achievement of development outcomes, as described by the A4NH ToCs.

Building capacity for agriculture, nutrition, and health research

In terms of its role in building capacity for ANH research especially in CGIAR, A4NH began in Phase I to provide support on specific topics (e.g., gender and nutrition) or to specific CRPs (e.g., the systems CRPs). The A4NH external evaluation found these efforts to be highly effective but very much under resourced in comparison to the need for this type of work in CGIAR. In Phase II, we propose to expand these efforts by establishing a CGIAR-wide community of practice (CoP) on agriculture, nutrition, health, with a strong focus on gender and an explicit goal of building capacity in CGIAR. This CoP will be hosted in the flagship on Food Systems for Healthier Diets, but will draw on expertise from across the program, especially from the cross-

cutting program on Gender, Equity, and Empowerment. While key elements such as gender, methods and metrics for measuring diets, and value chain analysis will be important topics in the CoP, a needs assessment will be conducted to define and prioritize the areas that the CoP should cover and provide a basis for developing a more detailed work plan, budget and monitoring systems to track progress. This work relates to elements 1, 3, 5, 6, and 7 of the draft CGIAR Capacity Development Guidelines

To build capacity in ANH research more broadly, a key component of our strategy is the [Agriculture, Nutrition and Health Academy](#) that is convened by A4NH and LCIRAH. The key goals of the Academy are to support the development of the next generation of ANH research leaders as well as work with academic networks in Africa and Asia to foster innovative cross-sectoral metrics and methods through working groups of senior and next-generation researchers. A4NH will also support ongoing initiatives such as the [African Nutrition Leadership Programme](#) (ANLP); the [Improving Nutrition Outcomes through Optimized Agricultural Investments](#) (ATONU), coordinated by Food, Agriculture and Natural Resources Policy Analysis Network (FANARPAN); the [Evidence-informed Decision-making in Nutrition and Health](#) (EVIDENT) partnership that supports nutrition capacity in countries coordinated by the University of Antwerp, as well as relationships with African nutrition societies and regional groupings of African agriculture and health research such as [Afrique One](#) and the [Southern Africa Center for Infectious Disease](#) (SACIDS).

Much of the more technical capacity development will be conducted by national partners and networks such as ATONU for nutrition and Afrique One and SACIDS for health. A4NH will ensure that its knowledge and evidence is made available to these groups through open data, publications and examples through networks such as the [Regional Universities Forum for Capacity Building in Agriculture](#) (RUFORUM) and [National Agricultural Education Project](#) (NAEP) initiative of the Indian Council of Agricultural Research (ICAR) in South Asia. We will also be open to engaging with other partners in sharing experiences from research activities we are carrying out in the countries. This work relates to elements 4, 5, and 6 of the draft CGIAR Capacity Development Guidelines.

Building capacity for development outcomes along A4NH impact pathways

The [A4NH ToCs](#), defined around major outputs and research clusters, clearly identify what capacity changes are expected among which types of actors in order for outcomes to happen at scale. In some cases, A4NH has a role in building this capacity directly (Capacity Development Elements 1 and 2). In all cases we need to ensure that it happens by identifying the organizations (public, non-profit, private) who will provide it and engaging with them to ensure that they are willing and able to do so (Capacity Development Elements 2 and 6). We may also undertake research with these partners to identify the most cost-effective ways to strengthen capacity among particular target groups (Capacity Development Element 9).

The target groups whose capacity we seek to strengthen generally depend on the type of impact pathway through which we expect research to contribute to development outcomes at scale. As described in the results framework, most of A4NH research is expected to work through three types of pathways:

a) *Value chains*: This mechanism is via healthy and equitable production, processing and marketing of nutritious and healthy food. The main actors in this pathway are farmers, intermediaries (traders, processors, and retailers), consumers and regulators. The main contribution of A4NH is normally technologies, institutional or market innovations, or contributions to regulatory reforms.

b) *Programs*: This pathway is via programs that integrate nutrition and health with agriculture interventions, typically NGO projects or government programs. The main contribution of A4NH is to understand better what works and what does not, and produce lessons on the selection and management of interventions. The key actors in this pathway are the development program staff (at various levels within the organizations) and donors who fund the programs.

c) *Policies*: This pathway is via feeding research evidence into national and international policies. Key actors are policy makers, their staff, or other stakeholders in policy processes who could include, for example national researchers, civil society organizations, or industry groups.

Capacity development in value chain impact pathways

Some major parts of the A4NH program build on past CGIAR research to develop agricultural technologies and approaches that have the potential to contribute to improved nutrition and health outcomes. Examples include the flagship on Biofortification (building on the HarvestPlus program), and Food Safety that builds on the development of farm-level technologies for aflatoxin control and market-level interventions to improve food safety in value chains for meat, milk and fish. In the past, CGIAR focused on developing technologies with the expectation that agricultural extension services, private companies or NGOs would do the work necessary to ensure their uptake and use by farmers or other market actors. Ultimately these types of organizations still have a crucial role to play in ensuring that the technologies are available and effectively used. However, it is increasingly recognized that there is often a gap between technology development and technology delivery that, if not addressed, may result in technologies not going to scale. Identifying and addressing these gaps, some of which could relate to capacity, may be an important role for the CGIAR (Dalberg Global Development Advisors, 2014). This may be a particular concern for technologies that are promoted not only for their economic and productivity benefits but also for their nutrition and health benefits, where consumers are a key target group for capacity and behavior change.

The ToCs developed to date for the biofortification and food safety research areas (N. L. Johnson, Guedenet, & Saltzman, 2015) highlight key capacity needs among different types of actors along the pathway. In some cases, such as Biofortification, where the program is involved in dissemination of biofortified varieties as a “proof of concept” of delivery at scale, activities are already being undertaken to address key capacity gaps by supporting different national actors, in the public and private sectors. A key objective is to learn lessons about what types of capacity strengthening need to be a part of future strategies for disseminating biofortified varieties at scale.

In Food Safety, the research teams have been engaged with farmers and value chain actors to raise awareness and to develop and pilot test technologies and other innovations. Researchers and partners in this flagship have engaged in extensive training of farmers and awareness raising among consumers. The development of the ToCs in Phase I (N. Johnson, Atherstone, & Grace, 2015; N. Johnson, Mayne, Grace, & Wyatt, 2015) highlighted important gaps in the knowledge base about the behavior and incentives of consumers and intermediaries that require more research before appropriate, effectiveness capacity development strategies can be defined. Addressing these gaps is a priority research issue. The Food Safety research team is working with different communication and capacity development partners, such as the [Technical Centre for Agricultural and Rural Cooperation](#) (CTA).

In the flagship on Food Systems for Healthier Diets, we will co-develop value chain and food systems innovations with other CRPs and with private sector actors. Frameworks and tools to support value chain interventions to improve nutrition have been developed, and they will be piloted in Phase II. This flagship will have a particular focus on understanding the role of consumers in food systems and how to reach and influence them. To date, this has not been a priority area of work in CGIAR however the leader of this flagship, Wageningen University and Research Centre (Wageningen UR), has more expertise. The private sector has the most experience in influencing consumer behavior, though not always to the benefit of nutrition and health outcomes. This flagship will focus on adapting lesson from effective private marketing efforts to improve the diet outcomes of food systems.

Capacity development in program pathways

The [ToC for the flagship on Integrated Programs to Improve Nutrition](#) recognizes that the capacity of implementing organization to use evaluation results in the design and delivery of programs is crucial to achieving the outcomes of more effective programming. Some direct capacity development takes place in this flagship (in the context of evaluating development interventions with implementers) however the main way that A4NH contributes to developing capacity at scale is through developing and disseminating capacity strengthening materials. In Phase I, A4NH research made important contributions to evidence gaps and much of this research was taken up quickly into guidelines and approaches to agriculture for nutrition that were used by major investors and development implementers. In Phase II, we are expecting more research results and important synthesis papers. We also plan to make a greater investment in translating these results into actionable advice and guidelines with partners and expanding their reach to include more development partners. In Phase I, we undertook a study to better understand [how NGOs access and use research findings](#). Capacity was an important issue mentioned by implementers.

Capacity development in policy pathways

As shown in the A4NH results framework, policy is an important and complementary pathway to value chains and programs. Most of the flagships recognize how policy can facilitate or constrain uptake of technologies and engage with policy actors to provide evidence and build capacity that should lead to more informed and more appropriate policies. One flagship on Supporting Country Outcomes through Research on Enabling Environments, is focused on understanding how this policy engagement can be more effective, especially in multi-sectoral contexts that are so crucial for nutrition and health outcomes. This flagship does research on how to create an enabling environment for nutrition and health. Capacity is an explicit component of their research framework (Gillespie, Haddad, Mannar, Menon, & Nisbett, 2013) and building capacity is a key aspect of [their ToC](#). The flagship team is actively engaged in [building capacity of policy leaders](#) in an action research mode to learn about how enabling environments can be built and sustained (Capacity Development Elements 7 and 9).

Policies are developed at many levels from local to international and A4NH works across scales. However, we have a particular focus on countries because of the [important role that countries will play](#) in setting and achieving nutrition and health targets (International Food Policy Research Institute (IFPRI), 2014). This country-led development approach requires that knowledge be translated and communicated to support countries. Linked to this will be building the capacity of national champions to lead this process as well as capacity development partners to build the country teams to implement and learn.

In these country-led processes for better nutrition and health outcomes, countries have adopted whole-of-society approaches. This has huge implications for how agriculture links to nutrition and health outcomes. One implication is that agriculture needs to focus more on dietary diversity and change for better nutrition and health outcomes. In most countries, agriculture strategies and implementation efforts focus on overall production and productivity. The second is that agriculture needs to engage with other sectors such as health and social development in improving priority nutrition outcomes if important government goals such as reducing the incidence of stunting are to be met. Two A4NH flagships, Supporting Country Outcomes and Food Systems for Healthier Diets, are specifically designed to support country-led development processes and they will include important, complementary capacity development efforts in those countries.

Elements of capacity development

Table 1. Capacity development in A4NH, linked to the nine elements in the CGIAR Draft Capacity Development Guidelines for the 2nd round of CRPs

Element 1: Capacity Needs Assessment and Intervention Strategy Design	
A4NH examples	<p>Capacities across a range of disciplines are critical to country-led strategies for nutrition and health linked to agriculture.</p> <ul style="list-style-type: none"> • Flagship on Strengthening Country Outcomes through Research on Enabling Environments will work with countries on overall strategy assessment including capacity needs and how these fit in ToCs • With the EVIDENT partnership will provide more focused response to countries and also networking between countries on essential capacities that will allow key nutrition champions to participate more actively in strategy design
Element 2: Design and Delivery of Innovative Learning Materials and Approaches	
A4NH examples	<p>Content co-development will be a major product from all flagships.</p> <ul style="list-style-type: none"> • Agriculture-nutrition pathways, gender-nutrition and nutrition-sensitive methods and metrics community of practice (Supporting Country Outcomes through Research on Enabling Environments) • Tools for country planning and implementation of breeding and delivery of biofortified varieties (Biofortification) • Co-development of tools and research to implementation ‘knowledge translation’ products with NGOs, SUN Civil Society, UNSCN, and the FANTA and SPRING projects (Integrated Programs to Improve Nutrition) • With ATONU, tools and frameworks for diagnosing the opportunities to incorporate tailored nutrition interventions into agriculture investments (Supporting Country Outcomes through Research on Enabling Environments) • <i>Transform Nutrition</i> short courses for policy makers (Supporting Country Outcomes through Research on Enabling Environments) • EVIDENT (Supporting Country Outcomes through Research on Enabling Environments) • Upgrading university curricula for risk-based approaches to food safety (Food Safety) • Multi-disciplinary research methods, tools and approaches and integration into university curricula in Africa and Asia with SACIDS, Afrique One, SE Asia Ecohealth Network, Public Health Foundation of India (Improving Human Health) • Working groups (to be developed) on metrics and methods through the ANH Academy (all flagships) • Nutrition and health outcomes as a usable tool for researchers and implementers, supported through the Gender-Nutrition Idea Exchange and work on the Women’s Empowerment in Agriculture Index regarding (cross-cutting issue on Empowerment of Women and Vulnerable Groups) <p>Harnessing technology for capacity development</p> <ul style="list-style-type: none"> • Major initiatives with CTA on outreach and scaling out of food safety knowledge and practice • Major initiative with mobile phone providers for agriculture, nutrition and health messaging (ILRI in a consortium with CABI)
Element 3: Develop CRPs and Centers’ Partnering Capacities	

A4NH examples	This capacity development element will be integrated into the A4NH Partnership Strategy so that we identify and build the capacity of partners at the national, regional, and global levels to increase the effectiveness of research and development partnerships.
Element 4: Develop Future Research Leaders	
A4NH examples	<p>The strategy is that we need to develop research leaders with good disciplinary skills in nutrition, public health, agriculture, veterinary science and socio-economics who are strong in their own disciplines and able to work well in a multi-disciplinary, multi-sectoral approach. Our disciplinary partners, embrace this approach.</p> <ul style="list-style-type: none"> • We will work closely with the African Nutrition Leadership Program, Federation of African Nutrition Scientists and PHFI for building nutrition research leaders, who are interested in nutrition-sensitive agriculture research. • We will work closely with partners such as SACIDS, Afrique One, who are interested in linking agriculture and health. PHFI and Chiang Mai University and Hanoi School of Public Health to bring together the next generation of OneHealth and Ecosystem Approaches to Human and Animal Health leaders. • For young agriculture researchers, one of the key leadership areas of importance is in evaluation of nutrition and health outcomes linked to agriculture. We try and bring the different sectors together to both support future multi-sectoral research leaders and form a community of practice across this broad research area through the ANH Academy.
Element 5: Gender Sensitive Approaches	
A4NH examples	<p>Gender and nutrition approaches are built into a community of practice (CoP) to help evaluation and gender staff in other CRPs with state-of-the-art methods and tools. This started in 2013 and we see evidence of adoption.</p> <ul style="list-style-type: none"> • The CoP will be expanded in Phase II as an activity under Food Systems for Healthier Diets, but gender and nutrition will remain an important component
Element 6: Institutional Strengthening	
A4NH examples	<p>While there are contributions to these elements in most flagships, these efforts are central to Supporting Country Outcomes through Research on Enabling Environments. Currently we have actions in Phase I related to two networks, <i>Transform Nutrition</i> and LANSAs in Afghanistan, Bangladesh, India, and Pakistan, and LANEAs in Ethiopia, Kenya, and Uganda.</p> <ul style="list-style-type: none"> • Institutional capacity will be an important element under the collaborations with EVIDENT, ATONU and PHFI. • We will convene annual events at global and regional levels to look at both innovation and on development outcome demands between agriculture research and nutrition and health policy and advocacy communities (EU-UNICEF, SUN Civil Society and other networks). <p>In our efforts to scale-out food safety in informal markets, the enabling environment is critical.</p> <ul style="list-style-type: none"> • Initial efforts with the EAC on evidence for aflatoxin risk and control options will be extended through the AU-PACA networks. • There will be support to national and regional food safety policy and advocacy forums in India, Uganda, Ethiopia, and Tanzania. These will build on current initiatives such as support to the national food safety policy task force in Vietnam and the regional work on informal dairy markets in East Africa, based on the initial Kenyan policy and advocacy experience.

Element 7: Monitoring and Evaluation	
A4NH examples	More details will be developed for the revised capacity development strategy and implementation plan at the proposal stage. We envisage case studies to assess capacity levels in the beginning of the Phase II and will show the benefit of capacity and institutional strengthening in selected countries with the IFPRI Capacity Development and country strategy support teams.
Element 8: Organizational Development	
A4NH examples	<ul style="list-style-type: none"> The earliest applications will be around scaling-out of biofortification in target countries to support the goals of (1) training and capacity development with NARS for the development and eventual release of biofortified varieties and (2) mainstreaming the biofortified traits into breeding parental lines to ensure, as new climate-adaptive varieties are developed in CGIAR Centers and NARS, these varieties will also contain higher levels of micronutrients. The action research and innovations will come from country delivery teams and assessed through the monitoring, evaluation and learning activities supporting country teams.
Element 9: Research on Capacity Development	
A4NH examples	We will explore this further. Enabling country performance research will have elements of on capacity development at the national system level. For example, the Kaleidoscope, policy process model, can identify capacity gaps of both institutions and individuals and different capacity development interventions implemented under the Supporting Country Opportunities flagship can be evaluated.

References

- Dalberg Global Development Advisors. (2014). *Delivery in the CGIAR*. New York, NY.
- Gillespie, S., Haddad, L., Mannar, V., Menon, P., & Nisbett, N. (2013). The politics of reducing malnutrition: building commitment and accelerating progress. *Lancet*, 382(9891), 552–69. doi:10.1016/S0140-6736(13)60842-9
- International Food Policy Research Institute (IFPRI). (2014). *Global Nutrition Report 2014: Actions and accountability to accelerate the world's progress on nutrition*. Washington, DC: International Food Policy Research Institute (IFPRI). doi:http://dx.doi.org/10.2499/9780896295643
- Johnson, N., Atherstone, C., & Grace, D. (2015). *The potential of farm-level technologies and practices to contribute to reducing consumer exposure to aflatoxins: A theory of change analysis | IFPRI*. Washington, D.C. Retrieved from <http://www.ifpri.org/publication/potential-farm-level-technologies-and-practices-contribute-reducing-consumer-exposure>
- Johnson, N. L., Guedenet, H., & Saltzman, A. (2015). *What will it take for biofortification to have impact on the ground? Theories of change for three crop-country combinations*. Retrieved from <http://www.ifpri.org/sites/default/files/publications/ifpridp01427.pdf>
- Johnson, N., Mayne, J., Grace, D., & Wyatt, A. J. (2015). *How will training traders contribute to improved food safety in informal markets for meat and milk? | IFPRI*. Washington, D.C. Retrieved from <https://www.ifpri.org/publication/how-will-training-traders-contribute-improved-food-safety-informal-markets-meat-and-milk>