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Agriculture for Nutrition and Health

Gender Strategy for Phase II Draft, Version 2.0 Updated March 2016

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1. Justification and rationale

The challenge of addressing food security is not simply a matter of ensuring that all people have enough food—or energy (calories)—to live a healthy life. A much more daunting problem is to ensure that poor people have access to *nutritious*¹ and high-quality diets. Typically, poor households subsist on monotonous staple-based diets; they lack access to nutritious foods, such as fruits, vegetables, animal source foods (fish, meat, eggs, and dairy products), or wild foods of high nutrient content. Lack of diversity in the diet is strongly associated with inadequate intake and risks of deficiencies of essential micronutrients (Ruel 2003; Leakey 1999; Arimond et al. 2010). The resulting deficiencies have farreaching health and nutrition consequences, both in the short and the long term. Economic constraints, lack of knowledge and information, and related lack of demand for nutritious foods are critical factors that limit poor populations' access to such foods.

Food production is just one factor in the consumption and availability of nutrients. Food is stored, distributed, processed, retailed, prepared, and consumed in a range of ways that affect the access, acceptability, and nutritional quality of foods for the consumer. Producing for consumption in the home or for local markets remains important in many places; but today, the more market-oriented nature of agricultural policies means that more farmers are net-food buyers and are thus affected by commercial markets. Increased commercialization and market-orientation of agriculture has spawned much interest in value chain concepts, but while these concepts and approaches have been widely used in international development, they rarely incorporate nutritional and other health considerations (Hawkes and Ruel 2011). Moreover, despite the large literature on the gender implications of agricultural commercialization (see, for example, von Braun and Kennedy 1994), only recently have gender issues been brought into discussions of value chains (Rubin, Manfre, and Nichols Barrett 2009). Understanding gender is central to improving nutrition and health benefits and reducing health risks along food chains and in agriculture production.

Food production is not sufficient to determine health and nutrition of all—the kind and quality of food produced, the poor's access to the right kinds and quantities of food, and the distribution of food within the household also matter. Health especially is affected by many determinants outside the sphere of agriculture. We understand that men and women face differential health needs and risks that vary across contexts and the life cycle. Ultimately, whether an individual is healthy and well-nourished depends on whether he or she obtains the right food, both in terms of quality and quantity, and the right inputs of health, care, and time.

Gender, nutrition, and health

Both men and women have important roles in achieving good health and nutrition. Men and women work together on family farms and in the labor market to earn income to buy food and other goods and services for their families. In addition to their roles as agricultural producers and income earners,

¹ Nutritious (or "nutrient-rich") foods are defined as foods high in essential nutrients, including animal source foods (fish, meat, eggs, and dairy products), fruits and vegetables, biofortified staples, fortified foods, and traditional local crops sourced from biodiverse systems (including neglected and underutilized species and wild foods). Specialized processed and/or fortified foods for populations with special needs (acutely malnourished children, people living with HIV/AIDS, infants) are also included in nutrient-rich (or nutritious) foods. Medicinal plants, although not classified as foods, represent an additional potential set of commodities that may be explored in this flagship, in partnership with agri-food system CRPs.

women are more likely to be caregivers and food providers within their families throughout much of the world, and thus are considered the guardians of household food security and nutrition. At the same time, economic and cultural factors, including gender roles – the socially-determined relationships between women and men - limit women and girls from actively participating in economic activities that may improve their status and the household's well-being, and decisionmaking related to food purchases and allocation that may improve their nutritional status. Biological factors increase women and girls' risk of experiencing micronutrient malnutrition and poor health, especially during their reproductive years. Adolescent girls in particular may be vulnerable owing to their youth and low social status in many societies, placing them at risk for early marriage or risky sexual behavior during a critical period for investment in their own human capital. Men face their own unique set of social and biological risks to attaining good health and nutrition. Gender roles in agriculture influence the difference occupational hazards men and women face: for example research from ILRI shows men are often more involved in slaughtering large animals and women in cleaning waste and caring for sick animals. To create synergies and impacts that are greater than the sum of the individual sectors (agriculture, nutrition, and health); there is a need to account for gender issues. It is not enough to focus on women as key to food and nutrition security; they must also be viewed in the context of their relationships with men, being influenced by, and also influencing, men. Therefore, this gender strategy sets out the ways to ensure gender is integrated into the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH).

Gender roles determine who raises which crops and which animals, how labor and other agricultural inputs are allocated among farm activities, how and by whom agricultural output is distributed and processed along the value chain, how food and income are distributed within the household, and which child gets more (or less) access to food and health care. Gender roles also determine exposure to hazards associated with agro-ecosystems. Addressing gender issues is necessary for the agricultural sector to contribute to better health and nutrition for all, given the evidence that:

- Households do not act in a unitary manner when allocating food and nonfood resources (Alderman et al. 1995; Haddad et al. 1997); males and females within households do not necessarily pool resources, and they often have different preferences on how to use limited household resources to achieve multiple objectives.
- Women tend to spend their additional income on food, healthcare, and children's education, while men spend more of their income on personal items. In Bangladesh, a higher share of women's assets is associated with better health outcomes for girls (Hallman 2000). Research from IFPRI estimates that equalizing women's status could lower child malnutrition in South Asia by 13 percent (13.4 million children) and in Sub-Saharan Africa by 3 percent (1.7 million children) (Smith et al. 2002).
- Gender roles often dictate what men and women grow and how resources are allocated to men's and women's plots. Udry (1996) finds, for example, one reason why women's maize yields were lower than men's, within the same household, was that fertilizer and labor tend to be allocated to men's plots.
- Women fulfill multiple household responsibilities, as the children's primary caregivers and as wage-earners. The literature suggests that factors such as poverty, an inflexible or time-intensive job, the type of alternative caregiver, and control over income earned can have a negative effect on child growth (Engle et al. 1999).
- Men and women have different roles in agriculture value chains from production to marketing (Aregu et al. 2011). Despite this evidence, Njuki et al. (2011) reports in Kenya and Tanzania that training on best practices is often still targeted mainly to men. In that same study, the researchers found that women and men did not have equal access to markets; women were

more involved in the sale of livestock products, yet they had a lower number of market options available to them than the number available to men.

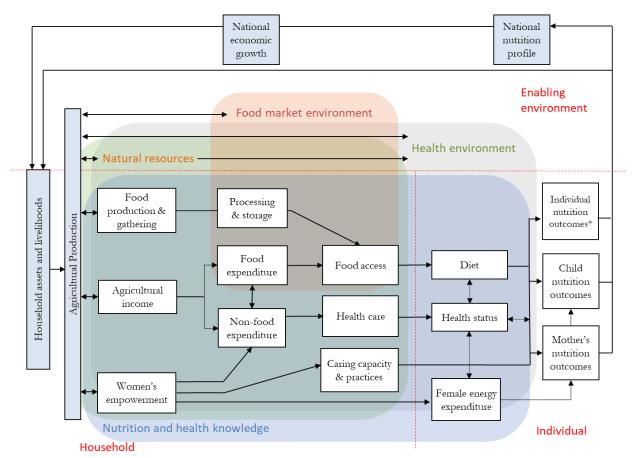
- The different roles men and women play in agricultural systems indicate men and women bear differential exposure to agriculture-associated health risks. For example, Wang et al. (2006) observed that women from a Tibetan nomadic pastoralist community had a significantly higher risk of *E. multilocularis* (a small tapeworm) infection than men. The authors speculated that this was because the traditional responsibilities of women put them in contact with dogs and dog feces more frequently than men, a risk factor for *E. multilocularis* infection.
- The reproductive role of women has significant implications not only for agricultural production during her lifetime, but also for the inter-generational impact of her nutrition and health status on future agricultural productivity through her children (Harris 2012). Frequent pregnancy and lactation may deplete a mother's nutrient reserves, which in turn can reduce the child's access to nutrients during gestation and through breastmilk (King 2003). This increases the risks that children will be born small, will continue to experience growth faltering during early childhood, will have impaired cognitive development and lower schooling performance, and will become smaller, less healthy and less economically productive adults (Martorell et al. 2009). In the many areas of the developing world where societal norms discriminate against girls, these effects will disproportionately affect girls and women, and perpetuate the transmission of poverty, poor health and undernutrition into the next generation. For example, early marriage and childbearing in many developing countries imply that many adolescent girls become mothers even if they have not yet attained full physical maturity, with negative implications on their own health and the health of their children.

Knowledge gaps we will help overcome

A4NH gender research aims to fill evidence gaps in the widely accepted framework that traces the links from agriculture to nutrition and health² (Herforth & Harris, 2014; Kadiyala et al. 2014) (Box 1). These pathways acknowledge the unique multi-functional role of agriculture, which, unlike other productive sectors, provides rural households with food as well as income, frequently employs multiple household members, directly affects household members' energy expenditure, and is shaped by household decisions.

While three of the six pathways explicitly reference the role of women in agriculture, gender matters for all of the pathways because: 1) existing gender differences in roles, preferences, and power mediate nutrition and health outcomes; 2) the agriculture-nutrition-health (ANH) pathways can bring differential benefits and risks to different genders and social groups, given that men and women have specific health needs and sources of resilience that vary across contexts and the life cycle, and 3) the pathways also present opportunities to shift gender relations, enhancing women's empowerment and their own well-being. A4NH seeks to understand how gender influences agriculture's impacts on nutrition and health through these pathways, as well as how the pathways can structure efforts to enhance gender equity.

² We have adapted the original framework on agriculture-nutrition pathways to extend to health outcomes. Further discussion is available <u>here</u>.





*Individual nutrition outcomes refer to the general population, including women, men, and adolescents (not just mothers & children).

Source: Adapted from Kadiyala et al (2014), Herforth and Harris (2014), Gillespie et al (2012) and Headey et al (2012).

- 1. Agriculture as a source of food: Farmers produce for own consumption.
- 2. Agriculture as a source of income for food and non-food expenditures: As a major source of rural income, agriculture influences diets and other nutrition- and health-relevant expenditures.
- 3. **Agricultural policy and food prices:** Agricultural conditions can change the relative prices and affordability of specific foods and foods in general.
- 4. **Women's roles in agriculture and intrahousehold decisionmaking** and resource allocation may be influenced by agricultural activities and gendered control of assets, which in turn influences intrahousehold allocations of food, health, and care.
- 5. **Maternal employment in agriculture and child care and feeding**: A mother's ability to care for her child may be influenced by her engagement in agriculture.
- 6. Women in agriculture and maternal nutrition and health status: Maternal health and nutritional status may be compromised by the often arduous and hazardous conditions of agricultural labor, which may in turn influence child nutrition outcomes.

Source: Adapted from Kadiyala et al (2014), earlier versions in (World Bank, 2007; Arimond et al., 2011; Gillespie, Harris, & Kadiyala, 2012).

Although consensus exists on the pathways as a guiding framework for research and practice on leveraging agriculture for nutrition and health, important evidence gaps remain. A number of systematic reviews have pointed to the lack of documentation of the effects of these pathways in practice (Ruel and Alderman 2013; Hawkes et. al 2012; Herforth et al. 2012; Masset et al. 2012). The first section of this summary discusses how existing evidence on the role of gender in ANH pathways informs research questions in the A4NH flagships and A4NH's strategic cross-cutting gender research.

In terms of gender research priorities, the pathways can be grouped into three strands of research that A4NH has addressed and will continue to investigate, using diagnostic gender analysis, gender impact studies, and explicit gender-based targeting³:

- Impact of gender-based differences on nutrition- and health-related outcomes (pathways 1, 2 and 3): In this category, research aims to identify which gender-based differences matter for nutrition and health outcomes, and the mechanism through which they influence nutrition and health (for example, men and women's preferences on production and consumption decisions, allocation of productive and reproductive work, and access to assets, credit, information, social capital, and so on) (de Brauw, 2014; Gilligan, Kumar, McNiven, Meenakshi, & Quisumbing, 2014). These questions are particularly critical for research related to agricultural development interventions or delivery, since investigating and addressing gender-based differences is important in the design and ultimately for the success of such projects (N. Johnson et al., 2013).
- Improving nutrition through women's empowerment (pathway 4): In the second category, A4NH research focuses on understanding the impact of different aspects of women's empowerment on various nutritional and health indicators. Aspects of empowerment that A4NH researchers have investigated for their impact on nutrition and health include measures of decisionmaking power (Peterman et al 2015), access to and control of assets (N. L. Johnson, Kovarik, Meinzen-Dick, Njuki, & Quisumbing, 2015; Quisumbing et al., 2015), autonomy in production and hours worked (Malapit, Kadiyala, Quisumbing, Cunningham, & Tyagi, 2013), and women's time use (Hull, Johnston, & Stevano, 2015). This research has begun to indicate that different aspects of women's empowerment influence different health and nutritional indicators (e.g. diets, child feeding practices, maternal and child anthropometric measures), and more research is needed to understand the patterns of impact in different contexts, as well as the mechanisms driving impact (van den Bold, Quisumbing, & Gillespie, 2013). It will pay particular attention to gender dynamics—relationships between women and men—as factors affecting empowerment.
- Avoiding **unintended consequences** to women's well-being and empowerment (pathways 4, 5 and 6): The third category of gender research aims to improve understanding of unintended consequences and trade-offs between outcomes of agricultural interventions. This research pays attention to how gender-based differences can increase women's exposure to risk (Grace, Olowoye, Dipeolu, Odebode, & Randolph, 2012) and potentially harm, to women and children's health and nutrition through impact on women's energy expenditure, time burden, and access to and control over assets.

These three research areas translate into specific research priorities in each flagship, as summarized in Table 1.

³ The research areas correspond principally, but not exclusively to the pathways named; each research area can be considered in each pathway.

Table 1. How A4NH gender research addresses gender evidence gaps (research areas in parentheses)

A4NH Flagship	Fundamental gender research questions
FP1: Food Systems for	How can healthy food systems benefit both women and men, as consumers and
Healthier Diets	value chain agents (gender-based differences; women's empowerment), while
	avoiding harm to women's time, work burden, and health status (unintended
	consequences)? Does information about healthier diets reach target beneficiaries
	and do their knowledge changes lead to behavior changes? (gender-based
	differences; women's empowerment)
FP2: Biofortification	How can we ensure that delivery of biofortified crops meets men, women, and
	girls' preferences and nutritional needs (gender-based differences), supports
	gender-equitable decisionmaking in production and consumption decisions
	(women's empowerment), and avoids harm to women's time, work burden, and
	health status (unintended consequences)? How can we promote adoption of
	biofortified crops by targeting appropriate household decisionmakers, including
	women and men?
FP3: Food Safety	How do exposure to agricultural diseases, strategies to manage risk, and the
	impacts of disease vary by gender? (unintended consequences; gender-based
	differences)? How can measures to improve food safety proactively include women
	and support them to engage in emerging formal markets? (gender-based
	differences)?
FP4: Supporting Policies,	How are gender dynamics (relations between women and men) and women's
Programs and Enabling	decisionmaking power associated with improved child and women's nutrition
Action through Research	outcomes (women's empowerment)? How can agricultural development
(SPEAR)	interventions enhance women's status (women's empowerment) while avoiding
	harm to women's empowerment, time, and health (unintended consequences)?
	How can policymakers develop cross-sectoral, gender-responsive policies? (gender-
	based differences; women's empowerment; unintended consequences) How can
	nutrition-sensitive agriculture programs engage men and sensitize them about the
	importance of gender equity? (gender-based differences)
FP5: Improving Human	How do the health risks and benefits of agriculture vary by gender (unintended
Health	consequences; gender-based differences)? How can measures to improve human
	health proactively include women (gender-based differences)? How can women be
	more involved in decisions about how to improve management of agricultural
	intensification to improve health outcomes (gender-based differences)? How can
	integrated agricultural and health development interventions engage women and
	girls while avoiding harm to women's time and health (unintended consequences)
	and engage men to play a greater role in supporting better health (gender-based
	differences)?

Strategic cross-cutting gender research themes

In addition to supporting the gender research areas in the flagships, A4NH also leads cross-cutting research on strategic issues relevant to the overall research program. In particular, the PMU and the Cross-cutting Gender, Equity and Empowerment (GEE) unit⁴ identified four priority themes to fill important gaps in the knowledge base on gender, nutrition, health and agriculture:

⁴ In Phase I, the GEE unit was referred to as the Strategic Gender Unit. The name change reflects a recommendation of the A4NH External Evaluation to pay more attention to equity issues.

- How women's empowerment affects nutrition and health: Recent studies find that different aspects of empowerment have impacts on various health and nutritional outcomes, and these vary widely in different settings (Malapit, Kadiyala, Quisumbing, Cunningham, & Tyagi, 2015; Malapit & Quisumbing, 2015; Sraboni, Malapit, Quisumbing, & Ahmed, 2014). In particular, the gendered control over assets, including water, technology, and land, has bearings on nutrition and health. Evidence-based and culture- and context-sensitive policies will therefore require a deeper understanding of which specific domains of women's empowerment matter for particular outcomes (Malapit & Quisumbing, 2015).
- 2. How to engage men in nutrition and health: Gender research in nutrition and health frequently focuses on women: safeguarding women's health, enhancing women's decisionmaking power, and improving women's nutrition knowledge. However, although women are primary caregivers, men have an important role to play. Some organizations⁵ have started experimenting with projects that work with men and with couples to support family health and nutrition behaviors, but the state of knowledge about what works to engage men in women and children's nutrition and health and women's empowerment is incipient. A deeper focus on gender relations and norms that help or hinder better nutrition and health outcomes is merited.
- 3. How to target the youth: Given that average age of the onset of childbearing is below 18 in much of the world, research is starting to highlight adolescence as a key window to reach girls and invest in their health and nutrition, including education on infant and young child feeding practices (IYCF) (Hackett, Mukta, Jalal, & Sellen, 2015). Key knowledge gaps include how to create lasting behavior change to postpone childbearing and improve IYCF, and the intersections between nutrition, health and family planning.
- 4. Linkages between gender, agriculture, health, and nutrition: Though health status is recognized in the UNICEF framework as an underlying determinant of nutrition, and health during pregnancy can directly affect children's health and nutrition, there is little known about how exposure to health risks in the context of rural livelihoods vary by gender, deriving from men and women's division of labor, differing power to access health services, and distinct ways of coping with risk. These agriculture-associated health risks include unsafe WASH practices, environmental enteropathy, malaria, and more.

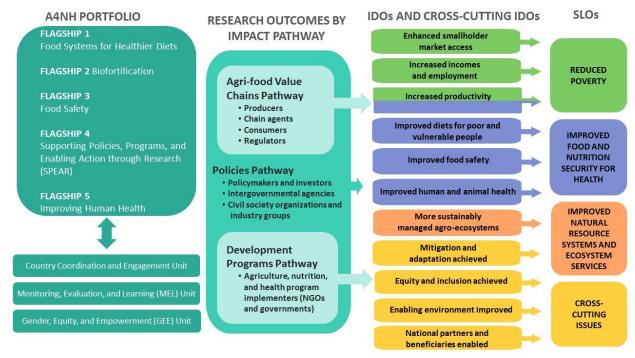
2. Goals and objectives

Program goal and objectives

A4NH responds to the global challenge of improving food security, nutrition, and health. The *strategic goal* of A4NH in Phase II is **to accelerate progress in improving the nutrition and health of poor and vulnerable populations, especially the nutritionally vulnerable mothers, young children and adolescent girls,** by providing knowledge and evidence for nutrition- and health-sensitive agriculture solutions and assessing how these solutions will be delivered for improved nutrition and health outcomes at scale through five proposed research flagships: Food Systems for Healthier Diets, Biofortification, Food Safety, Supporting Policies, Programs and Enabling Action through Research (SPEAR) and Improving Human Health with a cross-cutting initiative on the empowerment of women and vulnerable groups. Figure 1 below summarizes how A4NH contributes to the CGIAR Strategy and Results Framework.

⁵ Notably, Promundo and CARE USA (Pawlak, Slegh, & Barker, n.d.), and IFAD's Household Methodologies project

Figure 2. A4NH Phase II Results Framework



Source: A4NH Phase II Proposal

Our approach to gender research

The evidence has shown that gender is central to accelerating better nutrition and health outcomes. Gender will continue to be central to the A4NH results framework and is integrated in each of A4NH's five research flagships. Consistent with the recommendations of the external evaluation, AN4H will continue to invest in cross-cutting gender research on frontier research topics where there are demonstrated knowledge gaps, on key conceptual and methodological questions, and to develop and validate indicators and tools. These gender research areas are relevant to A4NH's overall research agenda and will thus be conducted at the CRP level, in addition to the integrated gender research conducted at the flagship level. More specific gender research questions are outlined in the next section on impact pathways.

A4NH will use the following definitions of the terms 'gender,' 'equity,' and 'empowerment':

- **Gender** Social category usually associated with being a man or a woman. It encompasses economic, social, political, and cultural attributes and opportunities as well as roles and responsibilities (Rubin, Manfre and Barrett 2009).
- Equity –Based on the idea of moral equality i.e. the principle that people should be treated as equals and that despite many differences, all people share a common humanity or human dignity. The three principles of equity are: equal life chances, equal concern for people's needs and meritocracy (Jones 2009)
- **Empowerment** Expansion of people's ability to make strategic life choices, particularly in contexts where this ability had been denied to them (Kabeer 2001)

Goals of gender research

The primary goal of the A4NH gender strategy is to facilitate the achievement of our nutrition and health objectives through greater attention to gender issues along the impact pathways as described in more detail below. A secondary goal is to ensure that A4NH research does not exacerbate existing gender inequities and, where feasible, fosters positive change in women's empowerment.

Objectives and outcomes of gender research

A4NH research, undertaken by its flagships and cross-cutting program on GEE, is expected to contribute to the Gender IDO, and in particular, to the sub-IDOs on *gender-equitable control of productive assets and resources*, and *improved capacity of women and young people to participate in decisionmaking*. Table 2 below presents some proposed milestones of the gender research undertaken by A4NH.

Gender is widely recognized as an integral part of the different systems of agriculture, nutrition, and health. Women are traditionally the guardians of household food security and nutrition, yet decisions about what foods to produce, where foods are sold and purchased, and how foods are allocated to different household members often differs by whether men or women are making the decision. These household decisions have varying degrees of effect on the health and nutritional status of household members and are therefore important to understand in ANH research. A selection of some of the researchable questions we seek to investigate through A4NH are summarized in Annex 1. The questions are illustrated on each of the three impact pathway diagrams in the next section (Figures 3, 4 and 5).

Flagship	Research Milestones	Means of verification
FP1: Food Systems for Healthier Diets	 Identification and design of gender-sensitive interventions to improve diets in key countries 	Proposals for 2 interventions in each country developed (with gender analysis components) and submitted for funding
	 At least four gender-sensitive interventions co-designed and tested with local platforms, partners, and stakeholders in key countries and/or additional countries 	Age- and sex-disaggregated datasets generated as part of intervention testing made available; Reports on key leverage points available; policy briefs on evidence of key food systems innovations available
FP2: Biofortification	 Lessons learned about factors (e.g., gender, equity) facilitating and hindering adoption and consumption developed and widely disseminated for use in decisionmaking by partner and implementing organizations 	Publications (include gender and equity analysis); Head of Impact
	• Efficacy of multiple biofortified crops in culturally accepted combinations for women of child bearing age and for children 6-24 months of age, and results are incorporated into decisionmaking tools	Head of Nutrition; Publications (include gender analysis)
FP3: Food Safety	• Evidence from Phases I and II is turned into gender-sensitive guidelines for traders and policy/regulators in at least two types of value chains (dairy, fish, vegetables) in target countries	Monitoring reports; publications which include a section on gender
	 At least 40 public sector agencies and agri-businesses adopt gender-sensitive aflatoxin mitigation technologies (Aflasafe, post-harvest practices and aflatoxin testing) for reducing aflatoxin in crop value chains 	Partner reporting; tracking (including gender indicators) of implementation of regulations and policy
FP4: Supporting Policies, Programs and Enabling	 Discourse, attitudes, behaviours, practices on cross-sectoral nutrition-sensitive agriculture incorporate new knowledge/ approaches on climate change and gender relations 	Annual reporting (which include gender) from partners; citations in official policy statements and documents

Table 2. Proposed milestones of gender research

Action through Research (SPEAR)	 Program implementers (governments, INGOs, NGOs, UN institutions) have increased understanding of (gendered) impact of nutrition-sensitive agriculture programs and improved capacity to use evidence, tools and methods in program design resulting in 16.8 million women and children in target countries benefitting from improved nutrition-sensitive programs being implemented by partner organizations and governments 	Tracking of program implementing partners through targeted interviews and reviews of documents on nutrition-sensitive agriculture programming, investments and best practices in 2018, 2021 and 2024
FP5: Improving Human Health	 Third theme-based symposia involving natural and social scientists from health and agriculture held to identify and develop research areas, recognizing gender and equity issues Field trials of methods to reduce disease risks in irrigated crop production systems, based on initial assessments of Knowledge, Attitudes and Practices of household farming communities in relation to vectors and vector-borne disease problems (including household decisionmaking and role of women), completed in sites in West and East Africa 	Event reports; gender sessions in symposia Monitoring and evaluation reports that include gender indicators
Cross-cutting: Gender, equity & empowerment	 A4NH flagships and other CRPs use A4NH tools and approaches to measure gender, assets and empowerment Institutions incorporate pro-WEAI tools and approaches into their academic and certificate programs for development professionals 	Monitoring database; GAAP2 annual monitoring and final evaluation; web searches on "pro-WEAI" to identify other users

Note: This is a partial list of gender-related research milestones based on the Performance Indicator Matrix submitted as part of A4NHs Phase II proposal

3. Theory of Change and Impact Pathways

The central premise of A4NH is that changes can be made to agricultural and food chain interventions and policies in order to improve nutrition and health benefits and reduce health risks for poor men, women and children. Nutrition and health benefits are expected through improved diets combining the greater availability, accessibility, utilization and safety of nutrient-rich foods and through the availability, adoption and delivery of biofortified staple foods. A4NH has a critical role in supporting other agricultural actors with these changes. Likewise, the intensification of agriculture and food systems is associated with a number of health risks associated with food, water and the transmission of diseases from animals to people. We expect that the nutrition and health benefits and reduced health risks will be achieved through a combination of market-oriented approaches and specific program interventions targeting poor populations. Enabling policies, enriching current sectoral thinking by being better targeted toward poor, marginalized, and socially excluded groups, will be needed to support the agriculture change process envisaged.

Without taking gender considerations into account, it will be impossible to achieve A4NH's overarching objectives for the poor and high-priority nutritionally-vulnerable women and children in the first 1000 days. Gender-responsive analytical approaches, tools, data and evidence will be used throughout the priority-setting, research and development, extension, dissemination, M&E, and impact assessment of A4NH. Throughout the research process, A4NH research will consider the differential rights, responsibilities, risks and vulnerabilities of males and females across the life cycle, in promoting healthy food systems, developing and disseminating biofortified crops, generating technologies to improve food safety, minimizing risks to human health from agriculture, designing, implementing, and monitoring nutrition- and health-sensitive agricultural programs, and in enabling cross-sectoral policymaking processes and investment environments. Because gender research should be context-sensitive, A4NH

research will also consider the way in which underlying inequalities in wealth, education, caste, or class (among others) interacts with gender. Each impact pathway has an associated theory of what changes need to occur for research outputs to contribute to these outcomes that will be explained in turn.

Before focusing on the A4NH flagships and associated impact pathways, it is important to place the A4NH theory of change and gender strategy in a broader CGIAR and research and development context. The CGIAR has a long legacy of building global food security. However, ensuring that consumers are able to access adequate supplies of healthy, affordable and safe food – to achieve nutrition security – requires a perspective that encompasses far more than agricultural productivity. It will need to pay attention to distributional and equity issues to effectively achieve food and nutrition security for all. A4NH has made a solid start in improving and enhancing synergies between agriculture, nutrition, and health in Phase I, building on important pre-CRP work in individual programs and Centers and raising awareness and understanding across CGIAR. In Phase II, additional focus will be brought to new demands: assuring food quality and safety; increasing the diversity and nutritional quality of diets, especially in poor households; reducing the health risks associated with intensified agricultural production; and supporting the design of effective policies and program approaches to improve the nutrition and health outcomes of agriculture and food systems development efforts. Food system innovations are required across commodities, linking policies, programs, technologies, and systems management. Private sector participants drive and dominate agri-food systems – from farmers to commodity processors to retailers and they must be more effectively engaged to identify opportunities, as well as constraints, to healthier diets. Given the roles, responsibilities and decisionmaking processes in agriculture, food systems, and child care and feeding, gender has and will continue to be integrated throughout the A4NH research agenda. In addition, A4NH will continue to invest in strategic gender research in collaboration with the CGIAR research program on Policies, Institutions and Markets (PIM) and other partners. The complexity of the A4NH Phase II Results Framework above (Figure 1) reflects the breadth of challenges that agri-food systems face in their ambitions to contribute to improving nutrition and health, and the ways in which A4NH research efforts can help to inform and shape responses to these challenges at individual, household, national, and global levels.

The A4NH portfolio is comprised of five proposed research flagships whose research inputs feed into three impact pathways leading to our expected outcomes: (1) *agri-food value chains* that provide more nutritious and safer foods; (2) *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.

3.1 Agri-food value chains for nutritious and safe foods

Value chains are inherently gendered, reflecting several broad factors: the different roles that men and women play across the spectrum of value-chain activities; the preferences of men and women for different value chains; and different levels of engagement of men and women in specific value-chain flagships and activities. A4NH focuses on two nutrition-sensitive value chains important to poor people: value chains for nutrient-rich foods and value chains for improving the nutrition of staple foods. Value chains for nutrient-rich foods include fruits and vegetables, fish, meat, milk and eggs—as well as traditional and local foods. These foods are also perishable and thus both food safety and nutritional quality need to be enhanced and verified along the chains. Research on value chains for staples will look at how those foods that dominate the diets of the poor and malnourished can deliver higher nutritional quality and how these foods can be effectively marketed to consumers who need them the most. Boosting these foods with micro- and macronutrients can provide nutritional benefits at scale.

A gender perspective can enhance this agri-food value chain work by:

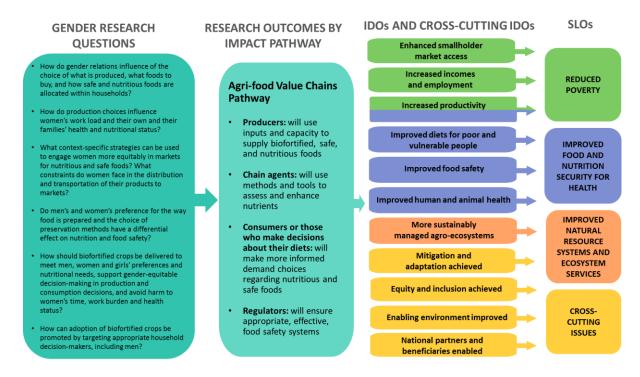
- Assessing the best way to provide men and women food producers with the technical and knowledge inputs to produce more diverse, safer and higher nutritional value foods. This includes selectively targeting relevant extension messages and training to women and others to men; mobilizing men's and women's social networks for disseminating nutrientrich crops; bundling extension messages with nutrition messages to appeal to women producers (biofortification and food systems); mobilizing both community health workers and agricultural extension agents to provide information on nutrient-rich foods.
- Enhancing or protecting the nutritional value and safety of foods along the value chain, from production to postharvest handling and storage, through processing and distribution to consumers. Improving postharvest processing would potentially have a high impact on women, not only to enable them to reach high-value markets but also for food safety and reduction of drudgery, which evidence indicates is borne particularly by women in the household (Meinzen-Dick et al. 2012; Blackden and Wodon, eds. 2006)
- Develop and assess alternative market arrangements that allow women to participate and have greater control of income and opportunities for saving and asset control. Research on a project designed to increase the incomes of smallholder dairy farmers in Kenya though community-based hubs of animal and financial services alongside a chilling plant, indicated that targeted education and interventions to women would be necessary to ensure genderequitable participation and benefits (Baltenwek and Omondi, 2011).
- Providing information and knowledge to consumers to positively influence behaviour in seeking more nutritious and safer foods (biofortification, food safety, and food systems). In many societies, women are responsible for food decisions for their households, and thus are a natural target for nutrition messages. At the same time, men should not be neglected as targets of nutrition messages, because they not only care for their families, but also make major decisions regarding the allocation of household resources. Understanding what messages are most effective at increasing women's access to nutritious and safe foods, and increasing men's support to obtain these foods, will be key.
- Recognizing the multiple demands made on women's time and being sensitive to how changes along the value chain could unintentionally increase this burden. Time allocation studies can provide valuable information on the impacts of value chain interventions on women's time. Research on rural smallholder dairy farmers in Kenya indicated that women from households who fit the criteria of those who would be targeted by a dairy intensification intervention were already spending twice as much time on dairy activities than women in higher and lower dairy producing households (Sreenath et al., 2010). Women have to make tradeoffs, but we do not want these tradeoffs to have unintentional negative consequences on women's nutrition and health or that of their young children.

Theory of Change

The new research evidence we provide to development agencies will help identify context-specific leverage points along nutrition-sensitive value chains to ensure that nutrition and health benefits are equitably maximized and risks equitably minimized for male and female actors along the value chain, particularly for households that are income- and asset-poor. Leverage points include choice of what is produced or consumed, women's workloads (both productive and reproductive), postharvest practices, marketing arrangements and food allocation within poor households. We will communicate this

evidence so that it is useful to decisionmakers and directly influences policy. Development agencies and farmers' groups will undertake training to enhance the application of this knowledge and information to design and implement more gender equitable interventions and will use this evidence to shape knowledge dissemination, food safety, postharvest processing, organization and workload distribution in nutrition-sensitive value chains. More gender-responsive support for value chains in knowledge dissemination will help increase women's capacity for decisionmaking and their control over production, marketing, and consumption. Agencies implementing better-designed, evidence-based interventions will improve male and female actors' ability to enhance nutrition along the value chain, especially through women's better access to new processing technologies, capacity building, or organizational capacity. More gender equitable decisionmaking, control and workload distribution in nutrition-sensitive value chains will contribute to a more equal distribution of their benefits and risks between men and women. Greater gender equality will empower women as well as men to manage production, processing and consumption in ways that are more "pro-nutrition" so that increases in gender equality will be positively associated with an increase in the delivery of more nutritious and safer foods to the poor. Figure 3 highlights a few research questions that we expect will lead to change along the impact pathway.

Figure 3. Agri-food value chains impact pathway: Gender research questions A4NH will address



3.2 Development programs integrating agriculture, nutrition, and health

A4NH will focus on generating knowledge for multisectoral development program implementers and investors about the role that agriculture can play in improving nutrition and health in different contexts and the ways in which agriculture can be combined with other social and public health interventions. A4NH will provide evidence of what works and what does not, what interventions can go to scale, and what design modifications need to be made to bring promising programs to scale. It will also support program implementers as they develop cost-effective and efficient monitoring and evaluation systems to improve their performance.

Paying explicit attention to gender considerations, together with their interactions with factors that exacerbate inequality, can enhance the effectiveness of these large scale programs. Our current flagship on Supporting Policies, Programs and Enabling Action through Research (SPEAR) is already paying attention to gender-related impacts by developing and using a set of gender-disaggregated indicators to assess the impact of ANH programs and documenting and disseminating the impact of ANH programs on women's social, health, and nutritional status. Recognition of specific gender-based constraints that hinder the effectiveness of these programs can also improve the design of future programs.

Other areas in which a gender perspective could enhance impact along the program pathway are:

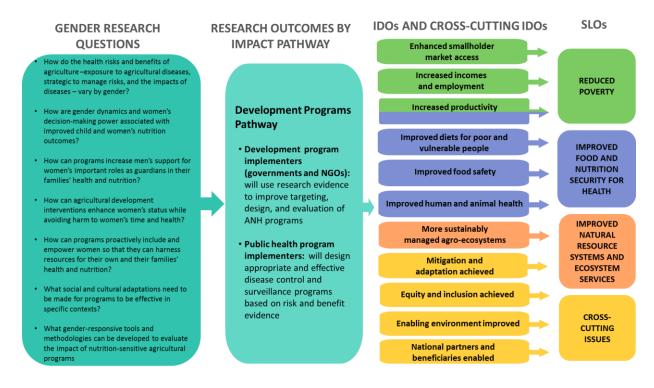
 Examining systematically how variations in program design can be used to adapt product or service delivery to clients' needs, whether it involves changing the delivery mechanism for ANH messages; using explicit behavior change and communication strategies targeted to women and men; designing culturally appropriate and acceptable technology, or providing culturally acceptable ways of marketing agricultural produce. Indeed, unless interventions are tailored to meet clients' needs, they likely will fail. This effort will also need to recognize that gender constraints may be manifested differently across the income distribution, with poorer or wealthier women being more or less constrained depending on context.

- Considering interactions among inputs rather than treating each input in isolation. Berti et al. (2004) found that agriculture interventions that invested broadly in different types of capital (natural, physical, human, social, financial) were more likely to improve nutrition outcomes. Those projects which invested in human capital (especially nutrition education and consideration of gender issues), and other types of capital, had a greater likelihood of effecting positive nutritional and health changes, but such investment is neither sufficient nor always necessary to effect change.
- Examining whether there are cultural and non-program related constraints to achieving good health and nutrition, particularly those related to women's relationships with men.
 For example, there is now growing evidence that experience of domestic violence is associated with higher child malnutrition rates. If channeling resources to women increases the incidence of domestic violence, interventions to reduce domestic violence and to increase support for women's empowerment may also need to be implemented.
- Describing the differential health risks men and women face in agricultural systems based on responsibilities and how responsibilities change with the introduction of new ANH projects. For example, perhaps these risks could be mitigated by increasing knowledge and awareness of risks among both male and female farmers if such messages were tailored to the different cultural contexts.

Theory of Change

Within nutrition- and health-sensitive agricultural programs, evidence generated by A4NH will demonstrate to donors and development agencies how large-scale programs can be designed in ways that effectively and equitably improve the social, health, and nutritional status of men and women. The theory of change for gender research in nutrition- and health-sensitive development programs argues that new engendered tools and indicators developed through A4NH can be used to design, implement, and evaluate nutrition- and health-sensitive agricultural programs at the community level. One assumption in this theory of change is that greater integration of agriculture and health through program delivery at community and national levels and in policy and investment formulation and implementation at national and regional levels will be required. With the regional focus, A4NH will be able to provide guidance on how to replicate and adapt programs to specific contexts to ensure they are sensitive to social issues and can be sustainable. Local capacity to design, implement, evaluate, and scale up development programs which are nutrition- and health-sensitive to be gender equitable will be developed alongside partners.

Figure 4. Development programs impact pathway: Gender research questions A4NH will address



3.3 Supportive policy

The success of policies and investments that result from A4NH research efforts will depend on how well they coordinate with broader economic and social transformation, other agriculture, health, and social development policies, and investment research and processes. Research on gender within A4NH will help increase awareness of the need to target gender inequality at the policy level in order to achieve health and nutrition objectives. Achieving gender equality is on the Sustainable Development Goals (SDGs) and to achieve other SDGs such as ending hunger and ensuring healthy lives, the commitment at the global level needs to translate into country-specific policies.

Our policy research in A4NH will be integrated with the gender research in PIM. A4NH will rely on PIM's efforts to improve the sex-disaggregated database for decision making in agriculture and disseminate research on gender through its policymaking partnerships and platforms. A4NH will focus its gender policy efforts on two areas: 1) examining agricultural policies more broadly to identify where they enable or disable women, and where they contribute to closing (or widening) the gender gap relative to nutrition and health outcomes; and 2) promoting cross-sectoral policy and decision making that promotes gender equality across agriculture, health and nutrition, and social sectors.

The five domains of empowerment laid out in the Women's Empowerment in Agriculture Index (WEAI) – production, resources, income, leadership, and time – will guide our policy analysis in the first area. Our goal will be to provide evidence to advocate for investments in order to increase women's empowerment in these five domains, as well as close the empowerment gap between men and women within the same households. This does not mean that we advocate policies to disempower men; rather,

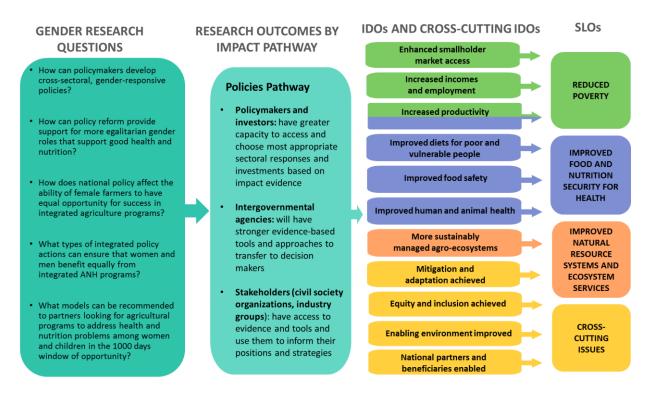
we want to close the empowerment gap, particularly in regions where gender disparities are marked and where they clearly contribute to poor health and nutrition. In addition, we will examine how different policy instruments can be used to shift power relations so as to increase the women's rights and decision making power so that they may be able to mobilize resources in support of their own and their families' health and nutrition.

Within the second area, we understand the demonstrated importance of using multiple levers to help women and involve men across the sectors of agriculture, nutrition, and health and we will be actively seeking to find and disseminate stories of both successes and failures. The case of Senegal is an example of the type of policy analysis work A4NH will do. Senegal has demonstrated remarkable success in the past 10 years in improving child health and nutrition. The government has committed resources to nutrition-sensitive agricultural programs, including setting up a national nutrition program with representatives from agriculture, nutrition and health; recruited partners to implement health and nutrition programs at the community level; and worked with the private sector to promote fortification. As a result, Senegal has some of the lowest rates in West Africa for child malnutrition and is on target to reach the MDGs for hunger. Relatedly, Senegal is making progress towards goals related to gender equality. Gaining an in-depth understanding of how these processes worked across different sectors of government and levels of governance and then taking these lessons learned from Senegal is one way A4NH can promote gender-responsive agriculture, health and nutrition policies that promote health and nutrition.

Theory of change

The theory of change for the policy pathway argues that disseminating research evidence from improved sex disaggregated databases on gender, health, and nutrition will increase the attention of policy makers and development agencies to target gender inequality through coherent policymaking across agriculture, health, nutrition, and social sectors. The country and regional-specific case studies will be shared with broad national, regional, and global audiences, facilitated in part through the formal and informal partnerships facilitated by our working relationship with PIM. These lessons learned combined with other policy analysis efforts serve to generate interest and commitment from political leaders and donors in taking an active role in reducing gender disparities in nutrition and health through agriculture. Furthermore, case studies are a useful way of spelling out how to make policies functional, which can increase the likelihood of buy-in. PIM and other partnerships/networks will ensure that we involve those institutions that can support and monitor policies in our research and dissemination process. Strategic communication of the evidence to political leaders, stakeholders, and donors will be crucial to the development of better cross-sectoral policy, regulation and investment and improved nutrition and health for men, women, and children.

Figure 5. Policy impact pathway: Gender research questions A4NH will address



3.4 Partnerships

Partnerships are driven by the three impact pathways by which we expect A4NH to deliver results: through agro-food value chains, programs, and policies. A4NH does not organize value chains, implement programs or make or implement policies. Instead, our research outputs are produced with or for partners along these pathways. We will build upon and expand the diverse set of partnerships with value chain actors, program implementers, and policy makers and investors working across gender, agriculture, nutrition, and health in Phase II to see this potential for impact realized.

In Phase II, we plan for more central management and leadership roles for external partners. **Managing partners** will include five CGIAR Centers, and two global partners – Wageningen University and Research Centre (WUR) and the London School of Hygiene and Tropical Medicine (LSHTM). Managing partners will be will be represented on the A4NH planning and management committee, recruit and co-manage flagship researchers, and actively support CRP-level resource mobilization, communication, and advocacy. **Strategic partners** will contribute largely to a single flagship or as key actors in cross-CRP and country-coordination activities and partners will actively engage in conducting joint research with other partners in A4NH. **Collaborating partners** will represent all others working with A4NH to make research for development contributions; these partnerships will be specific research, country activities or communication.

Building upon progress made in Phase I and the Extension Phase, key partnership activities in Phase II will include: aligning and engaging with regional organizations (e.g. SUN and CAADP) and with global initiatives and processes (e.g. IFAD, FAO, WFP, REACH and UNSCN) and networking and mutual learning which includes seeking partnerships to help build capacity for gender-ANH research at scale in the CGIAR (e.g. with the <u>Agriculture, Nutrition & Health Academy</u>, the Evidence-informed Decisionmaking in

Nutrition and Health (EVIDENT) partnership and other university-based institutions). A4NH will maintain research partnerships with other CGIAR centers and CRPs and institutes such as the Institute of Development Studies (IDS), University of Antwerp, Royal Vetinerary College (RVC), University of Nairobi, Sokoine University of Agriculture, Public Health Foundation India, Hanoi School of Public Health, Swiss TPH, Public Health Foundation of India and many others. Partnerships will also be sustained with enablers and implementers (e.g. World Vision, WFP, Mercy Corps, BRAC, Pradan, FAO, WHO) and actors in value chains (e.g. GAIN Marketplace for Nutritious Foods, AIM, The Sustainability Consortium, Pulse Innovation Platform and seed companies).

4. Gender-related Activities

A gender-responsive agricultural research, development and extension system calls for a comprehensive look at the system: who are the actors, who are the users of the technology, and whose needs are addressed at each stage, from priority setting, through implementation, to monitoring and evaluation, and impact assessment (Meinzen-Dick et al., 2011). AN4H aims to address gender issues in every flagship throughout the research cycle to inform and deepen the relevance of its own research, to inform other research themes, as well as to help the other CRPs use a gender lens to understand the nutrition and health implications and outcomes of their innovations.

Our gender-related activities are divided into three general areas:

- a) Strengthening the integration of gender in A4NH research
- b) Capacity building on gender, nutrition and health issues across the CGIAR and beyond
- c) Cross-cutting research on strategic gender and ANH issues, conducted by the GEE unit in partnership with other CRPs, external partners, and/or collaborators

4.1 Gender integration in A4NH research

All A4NH research flagships are expected to contribute to the SRF Gender IDOs and have articulated the significance of gender for successful delivery. The Phase II proposal outlines how gender issues are addressed in each flagship's theory of change, impact pathways, research questions, outputs and outcomes. Priority-setting and defining the gender research questions projects should address are conducted at the cluster level, informed by the theory of change for each research flagship. While gender is well-integrated at the planning stage for Phase II, we will continue to monitor projects throughout the research process to ensure that gender dimensions do not get lost in implementation, are appropriately reflected in research outputs, and get periodic feedback from projects to identify what types of support may be required from the GEE unit.

In 2014, A4NH started systematically collecting information on the gender research focus of projects. All projects are asked to report whether or not there is a gender research dimension to the project (and why not if there is no gender dimension), the gender research questions to be addressed, the types of sex-disaggregated data collected,⁶ the level of gender focus of each project deliverable (none, some, significant), and the name of the person responsible for gender research. Responses to these questions

⁶ In 2014, responses to this question gave us the information on the topics for which sex-disaggregated data were collected like anthropometry, consumption, production. This was later revised to ask what primary data is collected (panel, cross-sectional, FGD, etc.) and which of those are sex-disaggregated.

enabled us to assess how well the gender research questions identified are reflected in project deliverables, and track progress over time.

For example, the A4NH projects database indicate that 53% of active projects in 2014 report collecting primary sex-disaggregated data including, but not limited to, anthropometry, dietary intakes, food consumption, production, and decisionmaking. Furthermore, 76% of projects that collect sex-disaggregated data also address gender-related constraints. Based on the 2014 project-level information available, we estimate that 40% of projects use data to address gender-related constraints in our target population. In terms of completed project deliverables, 49% were reported as having *some* or *significant* gender focus in 2014. However, our analysis revealed substantial variation in the types of gender analysis reflected in the *some* and *significant* categories. To address this issue, we have developed standardized definitions for each category (in coordination with PIM) and plan to expand the "levels of gender analysis" in deliverables to reflect increasing depth in gender analysis:

- 0 None
- 1 Woman-focused
- 2 Sex-disaggregated data reported but no gender research questions
- 3 Some gender analysis but not main focus of research
- 4 Significant gender analysis is main focus of research

The information gathered at the work planning stage will be reviewed by the GEE unit (as was done for the 2015 Plan of Work and Budget), to help advise research teams on improving gender research before research plans are implemented. As deliverables are completed, the GEE unit will review completed deliverables to assess the quality of gender analysis in our research products.⁷ A4NH is also working with PIM to harmonize its M&E systems for tracking progress on the integration of gender in research. Further guidelines and updates to the gender section of the work plan template are expected to be used as part of future work planning processes.

Beyond monitoring the gender focus of research outputs, projects that focus solely on women or that collect but do not analyse sex-disaggregated data are particularly important to identify because they have the potential for doing more gender analysis, such as expanding analysis to include men and/or use sex-disaggregated data to conduct gender analyses in more depth. Such projects can be targeted for additional technical assistance, linking up researchers with gender experts and providing small grants to add a gender component or to collect gender-relevant data (more on this in the next section).

In Phase I, the Strategic Gender Unit (SGU) provided technical inputs to specific A4NH projects on an ad hoc basis, but did not keep track of whether our inputs were used and how our engagement has influenced the project moving forward. In Phase II we propose to track our direct engagement with researchers by collecting basic information on the persons/projects requesting gender inputs and their views on the quality of the support they received.

4.2 Capacity building on gender, nutrition and health issues

A4NH will build on the internationally-recognized research capability of IFPRI and its partners in studying the implications of gender in relation to agricultural research and food and nutrition security. For the <u>past 20 years</u>, IFPRI has collected data, tested models, and generated important findings on how gender relates to food and nutrition security, power and resource allocation within the household, market

⁷ This will be based on a random sample of completed deliverables per flagship; actual sample size will depend on available resources.

development and trade, institution-building, land tenure, natural resource management and overall economic development and poverty reduction. Notable examples include a multi-country program on gender and intrahousehold research that "shifted the burden of proof" by demonstrating that households do not behave as monolithic units with common interests and preferences (Alderman et al., 1995; Quisumbing, ed., 2003); the background research drawn upon for the FAO SOFA 2011 (Quisumbing et al., 2014); the background paper on gender for GCARD1 (Meinzen-Dick et al., 2011); and the development of the <u>WEAI</u>, and numerous guides for <u>collecting sex-disaggregated data</u> and conducting <u>gender analysis</u>. The gender specialists in A4NH work closely with those in PIM, making sure that there is cross-CRP exchange of methods and learning; a number of projects do cut across both CRPs.

However, not all research teams are expected to have equal gender expertise. Just because the ultimate outcomes are health and nutrition at the individual level does not mean that all gender-related factors are adequately taken into account and appreciated by researchers. Indeed, some A4NH researchers assume that just because the project addresses women's nutritional deficiencies or is targeted to women, that it has done an adequate gender analysis.

In May 2014, a <u>portfolio review</u> was completed to assess the status of gender research and capacity in A4NH. Overall, the review points to a need to continue building gender research and M&E capacity across the CGIAR and its external partners. In line with the recommendations, A4NH plans to continue providing gender methods training and support through the following activities:

- Annual Gender-Nutrition Method Workshops: A4NH has conducted two workshops to date, attended by about 40 A4NH researchers, researchers from other CRPs with nutrition IDOs, and other partner organizations. The first workshop focused on establishing common frameworks, and training on qualitative and quantitative data collection methods. The second workshop focused on women's empowerment and decisionmaking and included interactive case studies and "Research Clinics", individual consultations with senior gender researchers on methods questions. These workshops have been very well-attended and participants expressed continued demand for future workshops. Consistent with the recommendations of the external evaluation, we will explore alternative ways of extending the reach of these trainings, including providing access to workshop videos, webinars, and other virtual platforms.
- Gender Nutrition Idea Exchange: A monthly blog hosted on the A4NH web site, featuring contributions from researchers on how to conduct high-quality agriculture research that considers gender and nutrition issues. The blog has a large and growing readership⁸ and is a space for highlighting newer research topics, such as the <u>relationship of gender to</u> <u>agriculture and health</u> and <u>linkages between agriculture, climate change, and gender.</u>
- Learning events and other outreach activities for gender researchers: A4NH will reach out to the gender researchers identified in the projects database to help identify and support specific needs for capacity building. These could include, for example, workshops on specific topics or methods, organizing panels in major conferences to showcase gender research in A4NH, establishing a rotating webinar seminar series, and other types of outreach.
- Small grants for gender research: A number of small grants will be provided to A4NHmapped research projects participating in the Gender-ANH CoP that will build the evidence base around strategic gender research priorities. These grants will be combined with

⁸ The blog had 12,500 unique page views in 2015 and 8,655 users.

technical advising from the GEE unit. Projects that work in themes/clusters where gender research is relatively weak (as reflected in the project monitoring database) or where there are demonstrable knowledge gaps will be prioritized. A more detailed process for providing targeted support will be developed for Phase II in consultation with the Planning and Management Committee (PMC).

These activities will be part of a larger CoP in agriculture, nutrition and health that will build on smaller Phase I initiatives, e.g., the gender-nutrition work, the nutrition support to systems CRPs, to add value to research across the CGIAR, especially in the agri-food systems CRPs. This CoP will be managed by the flagship on Food systems for healthier diets but will draw from expertise across A4NH to meet needs identified in other CRPs.

Building capacity at scale in the CGIAR will require more cost-effective approaches. A4NH will seek partnerships with organizations who can lead the coordination of the CoP, and organize the delivery of trainings and technical assistance through the blog and a "helpdesk" function. Potential partners could include the <u>Agriculture, Nutrition & Health Academy</u> and other university-based institutions. Online courses such as the <u>Agriculture and Nutrition and Health training module</u> developed by LSHTM/LCIRAH for IrishAid, which provide basic training on gender roles in agriculture, also serve as an important resource for researchers in our CoP.

4.3 Strategic cross-cutting gender research

In addition to supporting gender research in flagships, AN4H will invest in cross-cutting research on strategic themes relevant to the overall research program. Research will be undertaken in topics that: a) fill major knowledge gaps along the ANH-gender impact pathways, b) build evidence on key conceptual and methodological questions (e.g., survey experiments on decisionmaking), and c) develop and validate indicators, tools and metrics that can be used to measure impact along the pathways. In particular, four priority themes emerge as important gaps in the knowledge base on gender, nutrition, health and agriculture (see discussion in Section 1, pp. 8-9): 1) how women's empowerment affects nutrition, 2) how to engage men in nutrition, 3) how to target youth, and 4) how the health risks and benefits of agriculture vary by gender. Across all these themes, explicit attention will be paid to how gender interacts with other sources of inequality.

A4NH will continue to invest in research that build evidence on key conceptual and methodological questions, and develop and validate indicators, tools and metrics that can be used to measure impact along the pathways. A significant stream of strategic gender-nutrition research in A4NH will be conducted in 2015-2020 as part of the second phase of the Gender, Agriculture, and Assets Project (GAAP2), which will adapt and validate a project-level Women's Empowerment in Agriculture Index that agricultural development projects can use to diagnose key areas of women's (and men's) disempowerment, design appropriate strategies to address deficiencies, and monitor project outcomes related to women's empowerment. GAAP2 is supported by BMGF and USAID, and will be undertaken in partnership with PIM (where WEAI is mapped) and implementing organizations. GAAP2 research will generate the first systematic body of evidence on how different types of agricultural projects can improve gender equity and improve nutrition and health outcomes.

Future research projects will be identified by the GEE unit in consultation with the PMU, flagship leaders, Independent Steering Committee (ISC), and the ANH CoP. Potential research topics may be evaluated using the following information:

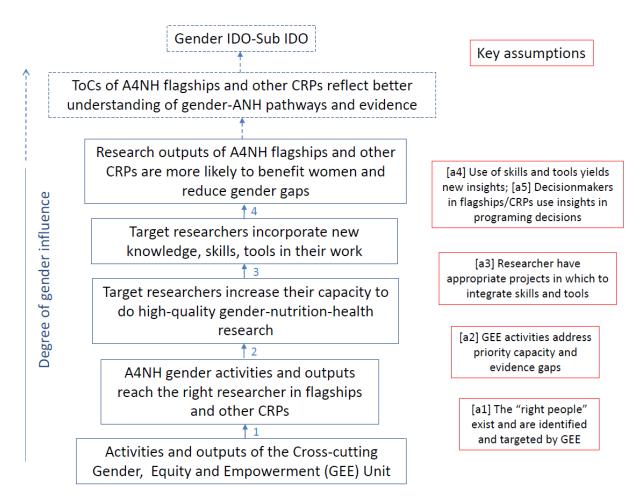
- Research gaps identified based on lack of coverage in the A4NH portfolio, and feedback received from A4NH researchers
- New or frontier issues at the formative stages of research
- Knowledge gaps that emerge from the latest evidence reviews in the ANH literature
- Topics where the GEE unit and/or partners have comparative advantage to undertake research
- Emerging opportunities for co-funding
- Other criteria as recommended by the PMU and flagship leaders

4.4 Gender theory of change

As recommended by the external evaluation, we constructed a theory of change specifically for the A4NH gender work to clarify how our gender activities are expected to make changes that lead to desired outcomes, describe assumptions and risks, and help identify ways to achieve our goals cost-effectively (Figure 5). The main outcomes to be monitored are described below along with our key assumptions and the actions we propose to take to ensure that they hold.

This Gender Strategy has outlined the fundamental gender research questions and themes that flagships and the GEE unit propose to focus on in Phase II, as well as our gender-related activities to strengthen gender integration across the portfolio, build capacity, and conduct strategic cross-cutting research. The A4NH gender researchers identified through our project monitoring database, as well as our network of CGIAR researchers and partners participating in our gender-nutrition CoP will be the primary target audience for our gender activities and outputs. They will learn about new tools, methods, indicators and evidence on gender in ANH research through direct participation in our workshops and outreach events, and by sharing information through the GNIE blog, mailing lists, videos, and other communications products. [1]. We will use web analytics, attendance lists, and evaluation forms to track access and participation for each type event or output. These activities will help increase the capacity of these target researchers to conduct high-quality gender-nutrition-health research [2]. To help achieve these first two outcomes, we need to make sure that we are reaching the right people in the flagships and other CRPs, and that our activities are designed to address their most pressing capacity gaps. We will rely on our project monitoring system to inform us about the demand for gender research support and coordination across the portfolio – i.e., who are the people responsible for gender research for all projects mapped to A4NH [a1], and what types of research outputs (methods, tools, indicators, evidence) and capacity building activities are needed to strengthen gender integration in A4NH research [a2]. For A4NH-mapped projects, we will monitor the proportion of projects that collect sexdisaggregated data, what types of gender research questions are being asked, and the level of gender analysis of completed deliverables in the work plans. The gender researchers identified by projects will be our primary resource persons for feedback and outreach to research teams across the portfolio. We will use the annual work planning cycle as an opportunity to check-in with projects as they progress, and propose mid-course corrections if needed. To assess the capacity gaps for other CRPs, we will seek feedback from CoP participants through pre- and post-workshop assessment forms as we have done previously. The information we gather from the project monitoring database as well as other forms of feedback will be used by the GEE unit to realign priorities for undertaking strategic research, target technical assistance to projects, and design capacity building activities to broaden our reach to researchers within A4NH and other CRPs.

Figure 6. Gender theory of change



Once researchers have increased their capacity to conduct high-quality gender research, we expect that they will incorporate this new knowledge, skills and tools into their work [3]. However, if they are engaged in projects that are unable to incorporate new gender components, perhaps due to resource constraints or other reasons, then there may be a significant lag between the time that capacity is built and the integration of gender into projects [a3]. To help shorten this lag and to maintain the momentum and interest from our capacity-building activities, we propose to provide a number of small grants combined with technical advising from the GEE unit, targeted to A4NH-mapped research projects that participate in the CoP. This will provide immediate opportunities for researchers to incorporate gender considerations in existing projects. As they gain more experience in using their new skills and tools, we also expect that this will increase the likelihood that researchers will propose and design future projects that are more gender-responsive.

To ensure that the GEE unit has sufficient capacity to provide technical assistance to projects, we propose to recruit research assistants based in other Centers/CRPs on a part-time basis to provide assistance to projects working in their regions. This will facilitate greater cross-CRP collaboration, and help strengthen capacity to conduct high-quality gender-ANH research across the CGIAR. We propose to recruit 3 research assistants based in South Asia, East Africa, and West Africa, respectively, with strong

backgrounds on gender analyses and knowledge of gender and social norms in their respective regions. A sample terms of reference is available in Annex 2.

If researchers conduct more gender-responsive research in ANH, then their research outputs will be more likely to benefit women and promote gender equity [4]. This implies that using a gender-responsive approach yields new insights that would otherwise not be revealed [a4], which is very likely given the growing evidence that shows that inattention to gender is not benign, and may even derail success. For example, the <u>HarvestPlus Strategic Gender Assessment (SGA)</u> concludes that, *"to reach its maximum targets for adoption of biofortified varieties, and for improved consumption of those crops by targeted women and children, [HarvestPlus] must better understand the roles and relationships of men and women, in the household and in other economic spheres, in the production, marketing and consumption of these crops."* Even if new insights exist, however, decisionmakers in A4NH flagships and other CRPs must be willing to use this information in their programming decisions [a5]. We will closely monitor the specific projects that receive A4NH support to encourage the use of relevant gender insights in their programming, and provide technical assistance if necessary to help them articulate their research questions and develop future work plans and project proposals.

How the research in flagships and other CRPs lead to the achievement of the Gender IDOs and sub-IDOs are captured in their respective theories of change and impact pathways, the details of which, for A4NH, are available <u>here</u>. The flagship-level outcomes and assumptions will be monitored and evaluated at the CRP level. Key theories of change for other CRPs to which GEE-supported research and researchers are contributing will be identified and monitored.

5. Monitoring and Evaluation

We will monitor our progress toward achieving gender-responsive objectives by reviewing the achievement of deliverables in all the flagships on an annual basis. Consistent with the theory of change presented in Figure 5, A4NH will use project-level information to track the progress of the integration of gender across the portfolio using the following indicators:

- Percentage of projects collecting sex-disaggregated data
- Percentage of projects that address gender-related research questions
- Proportion of A4NH W1/W2 funding in projects collecting sex-disaggregated data
- Proportion of A4NH W1/W2 funding in projects that address gender-related research questions
- Distribution of completed deliverables by levels of gender analysis
- Number of citations for A4NH publications with "some" or "significant" levels of gender analysis

Indicators that can be used for monitoring the reach of our capacity building activities can include:

- Number of researchers and partners trained in gender research methods (by sex)
- GNIE web analytics: unique users, unique page views, time spent per page, bounce rate, and other relevant indicators

We also propose to develop evaluation survey forms to be administered to researchers and partners who receive technical assistance from A4NH. We will explore new indicators and/or metrics that can be developed using the evaluation responses, and experiment on the ideal timing of such surveys. Overall, our monitoring and evaluation efforts will allow the PMU and the GEE unit to assess the extent to which A4NH-mapped or GEE-supported projects are taking gender into account, how gender integration has

influenced research findings, and how these findings are used by the research programs in current and future projects. The GEE unit will work with the Program Manager to provide gender feedback to Centers and make recommendations for mid-course corrections where warranted.

The external evaluation completed in July 2015 concluded that "given that [the gender] work only started two years ago, very good progress has been made on all three areas [strengthening research across A4NH, capacity building across the CGIAR, and identifying and making progress on some key cross-cutting research questions]". In this updated Gender Strategy, we have attempted to address the concerns raised by the evaluation by clarifying how our cross-cutting research priorities are informed by existing evidence, developing a clear theory of change for our gender activities, and proposing a more realistic budget given the demands for coordination, monitoring and technical support, alongside an expanded A4NH portfolio proposed in Phase II. A4NH is committed to using what we learn from our monitoring and impact assessment efforts to help fill the demonstrated evidence gaps in gender-responsive ANH research.

6. Budget

In 2013, a budget of \$250,000 was allocated from W1/W2 funds to support the implementation of the Gender Strategy, with a planned 20% increase in 2014 and 2015. However, budget cuts at the end of 2014 and again in 2015 meant that some planned activities were cut back or postponed to 2016, although part of the gender work were financed from other bilateral projects with nutrition and health components (e.g., GAAP, WEAI).

Table 3 shows the main lines of expenditure from the gender project in 2013-15. This underestimates the total investment in gender activities because there are a number of other funding sources. For example most of the staff time on monitoring gender and integrating gender into impact pathways was financed by the PMU, as was the staff time to organize the 2013 Workshop.

	2013	2014	2015					
Total expenditure (\$000)	26.5	245.1	248.4					
Gender research	0	48%	68%					
Capacity development & coordination	100%	52%	32%					
Methods Workshop as percent of Capacity Development and Coordination	86%	40%	27%					

Table 3.	Main	lines of	of expe	nditure	from th	e Gender	Strategy	budget
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Source: Gender team self-assessment, June 2015

Because gender is embedded into much of A4NH's research, it is difficult to calculate the exact proportion of the overall A4NH budget that is dedicated to gender research. A4NH estimates that about 12% of its total budget is currently allocated to gender research across the portfolio, but this is likely to be an underestimate given the caveats mentioned above.

Another way to look at this is to identify which projects pay attention to gender and assess their potential influence by mapping the amount of A4NH and total funding to some key gender focus areas

articulated in the original Gender Strategy (Table 4).⁹ To construct this mapping, we use information on project descriptions and gender research questions reported by Centers in their 2014 work plans. As a proportion of A4NH funding, roughly half of A4NH funds went to projects with gender focus areas. Gender analysis is the most prominent gender focus area, with 75% of the A4NH budget invested in projects that conducted some gender analysis. Building capacity to address gender issues in research remains the least emphasized gender focus area with 2% of the A4NH budget going to projects that exhibit this gender focus area. However, note that this does not include the PMU gender strategy funds that go in large part towards capacity building, underscoring the contribution that the PMU makes to gender capacity building within A4NH.

	Value Ch Nutritior		Biofortifi	cation	associate	Agriculture- associated Diseases		associated and Progr		ed Policies rams	Total:	
	Total budget	A4NH funding	Total budget	A4NH funding	Total budget	A4NH funding	Total budget	A4NH funding	Total budget	A4NH funding		
Gender analysis to understand roles of men and women	\$9.9m ¹⁰ (36%) ¹¹	\$7.4m ¹² (74%) ¹³	\$100m (95%)	\$25.8m (87%)	\$16.5m (53%)	\$9.0m (64%)	\$15.7m (35%)	\$3.0m (46%)	\$142.2m (68%) ¹⁴	\$45.2m (75%) ¹⁵		
Assessing gender specific risks in agricultural value chains	\$748k (3%)	\$748k (7%)	\$100m (95%)	\$25.8m (87%)	\$7.1m (23%)	\$3.3m (23%)	-	-	\$107.8m (52%)	\$29.9m (49%)		
Fostering women's participation in A4NH programs	\$405k (1%)	\$405k (4%)	\$100m (95%)	\$25.8m (87%)	\$1.3m (4%)	\$1.1m (8%)	\$1.1m (2%)	\$801k (12%)	\$102.8m (49%)	\$28.1m (47%)		
Empowering women and strengthening women's control of assets	\$4.2m (15%)	\$3.2m (32%)	\$100m (95%)	\$25.8m (87%)	\$788k (3%)	\$788m (6%)	\$8.4m (19%)	\$1.7m (26%)	\$113.4m (54%)	\$31.5m (52%)		
Promoting equitable intrahousehold food consumption	\$8.2m (29%)	\$6.3m (63%)	\$100m (95%)	\$25.8m (87%)	\$3.7m (12%)	\$2.0m (14%)	\$6.2m (14%)	\$488k (7%)	\$118.1m (56%)	\$34.6m (57%)		
Ensuring gender- sensitive technology and delivery systems	-	-	\$100m (95%)	\$25.8m (87%)	\$923k (3%)	\$788k (6%)	\$7.3m (16%)	\$1.8m (28%)	\$108.2m (52%)	\$28.4m (47%)		
Building capacity to address gender issues	-	-	-	-	-	-	\$1.3m (3%)	\$1.3m (20%)	\$1.3m (1%)	\$1.3m (2%)		
Flagship Total	\$27.9m	\$10.0m	\$104.9m	\$29.8m	\$31.1m	\$14.2m	\$45.2m	\$6.5m	\$209.1m	\$60.4m		

Table 4. Spending on projects with gender focus areas by flagship

Source: Gender team self-assessment, June 2015

⁹ This is not the budget that is directly allocated to the gender focus area, but rather the budget of the project, within which we do not know how much was spent on the gender activity. Note that gender focus areas are not mutually exclusive; a project may address any combination of focus areas.

¹⁰ Sum of total budget of all projects that include this gender focus area (including A4NH, bilateral, and other funding sources)

¹¹ Indicated as a portion of the total budget for this flagship.

¹² Sum of A4NH-allocated budget of all projects that include this gender focus area (through Window 1/Window 2 funding)

 $^{^{\}rm 13}$ Indicated as a portion of the A4NH funding for this flagship.

¹⁴ Indicated as a portion of the sum of all project budgets.

¹⁵ Indicated as a portion of the sum of all A4NH allocations to projects.

Although A4NH has made good progress on gender research in Phase I, as noted by the <u>external</u> <u>evaluation</u>, more human and financial resources will need to be invested in implementing the gender strategy for Phase II. The proposed annual base budget is about \$367,000 of Window 1/Window 2 (W1/W2) funds and more than \$8 million in total from bilateral funds, to support cross-cutting work on gender¹⁶, in addition to dedicated funds allocated for gender research for each flagship. About 25% of the base W1/W2 budget (\$560,000 in total) will co-finance strategic gender and nutrition research as part of GAAP2 in 2015-2020. The remaining 75% of this base W1/W2 budget (\$273,000 annually) will be used to support coordination and capacity building work, including a core gender team and for funding workshops and other outreach activities. An expanded team will be formed, subject to additional funds from an uplift budget. See Table 5 for team composition for the two different budget scenarios and Annex 2: Sample terms of reference for sample terms of reference for these positions.

Position	Core gender team (base budget)	Expanded gender team (uplift budget)
Gender research coordinator	33% FTE	67% FTE
IFPRI-based Senior Research Assistants/Research Analysts	20% FTE	200% FTE
Region-based Research Assistants	-	150% FTE
Gender postdoctoral fellow	50% FTE	-
Senior gender advisor	8% FTE	25% FTE
Senior equity consultant	\$20,000 annually	\$50,000 annually

Table 5: GEE unit composition under different budget scenarios (FTE = Full time equivalent)

With an expanded mandate, the GEE unit intends to add expertise on equity and empowerment, to ensure adequate attention is given to equity issues. Other major expenditure areas subject to the uplift budget include workshops, outreach and other capacity-building activities, and small grants to A4NH-mapped research projects. In the research flagships, gender funds may be used to hire gender experts, add gendered research components to existing studies, and establish strategic partnerships to complement CRP-level efforts. Table 6 shows the estimated distribution of funds from the base budget allocated for gender across the flagships and CRP-level cross-cutting programs for Phase II.

Table 6: Distribution of proposed A4NH Phase II gender budget by flagship and cross-cutting programs

Flagships	Budget (in US\$ millions)
FP1: Food Systems for Healthier Diets	4.7
FP2: Biofortification	4.6
FP3: Food Safety	0.8
FP4: SPEAR	43.5
FP5: Improving Human Health	2.7
Cross-cutting: Gender, Equity and Empowerment	10.9
Total budget for gender	67.2
% of total A4NH Phase II base budget	11%

¹⁶ This includes \$5 million for GAAP2 plus additional funds that the A4NH PMU plans to raise in Phase II

7. Management System

The Program Director, the five flagship leaders, and the Gender Research Coordinator will take responsibility for ensuring that gender is integrated into A4NH activities. An IFPRI Senior Research Fellow who has done extensive research on gender issues will act as the Senior Gender Advisor to provide overall guidance in implementing the gender strategy and undertaking strategic cross-cutting gender research. As the emphasis on equity issues becomes more fully integrated into A4NH programming, the GEE unit may also consider adding (on a part-time basis) a Senior Research Advisor whose mandate is to focus on equity issues. The Gender Research Coordinator and Senior Gender Advisor will participate in the PMC, and share responsibilities as appropriate. The Program Manager, with support from the Gender Research Coordinator, will be responsible for monitoring how Centers' activities are meeting gender-responsive goals and objectives.

A4NH activities will be monitored twice a year for progress toward gender goals when the PMC convenes for their bi-annual meeting. Centers and key research partners will also be asked to provide gender highlights in their annual reporting to A4NH, and we anticipate that gender will be included as part of an annual independent review of the program by the ISC. In an effort to objectively assess our strengths and weaknesses in meeting gender objectives in our research, we will likely ask for periodic external review on specific topics, as needed.

8. Annex 1: Summary of some researchable questions organized by impact pathway

Impact Pathway: Agri-food value chains

How do gender relations influence of the choice of what is produced, and how do production choices influence women's work load and their own and their families' health and nutritional status (particularly young children)?

What nutritious and safe foods can best be marketed as most beneficial for women and children in the 1000 day window of opportunity? How can these foods be effectively marketed to the target consumers?

What context-specific strategies can be used to engage women more equitably in markets for nutritious and safe foods? What constraints do women face in the distribution and transportation of their products to markets?

Do men's and women's preference for the way food is prepared and the choice of preservation methods have a differential effect on nutrition and food safety?

How do gender relations influence household decisionmaking about what foods to buy, and how safe and nutritious foods are allocated within households?

Impact Pathway: Development programs

How can programs increase men's support for women's important roles as guardians in their families' health and nutrition?

How can programs empower women so that they can harness resources for their own and their families' health and nutrition?

What social and cultural adaptations need to be made for programs to be effective in specific contexts?

What gender-responsive tools and methodologies can be developed to evaluate the impact of nutrition-sensitive programs?

Impact Pathway: Cross-sectoral Policy

How can policy reform provide support for more egalitarian gender roles that support good health and nutrition?

How does national policy affect the ability of female farmers to have equal opportunity for success in integrated agriculture programs?

What types of integrated policy actions can ensure that women and men benefit equally from programs that are nutrition- and health-sensitive?

What models can be recommended to partners looking for agricultural programs to address health and nutrition problems among women and children in the 1000 days window of opportunity?

9. Annex 2: Sample terms of reference

Gender Research Coordinator

<u>Job Summary:</u> The CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) seeks a qualified candidate to serve as a Gender Research Coordinator based at the IFPRI headquarters in Washington, DC. The Gender Research Coordinator will be working in close collaboration with the A4NHs Program Management Unit (PMU) and Senior Research Fellows and to manage the A4NHs Gender, Equity and Empowerment (GEE) unit and implement the A4NH Gender Strategy. The successful candidate will work on the integration of gender, equity and empowerment issues into the research of A4NH, which will include building awareness and capacity of researchers in partner institutions, including other CGIAR centers, and identifying and leading the implementation of strategic research issues related to gender, women's empowerment , equity and nutrition and health.

Essential Duties:

- Manage the A4NH Gender-Nutrition Community of Practice
- Develop training modules on the design and collection of gender-disaggregated statistics on agriculture, food and nutrition security and health
- Design and implement capacity building activities for partners including CGIAR researchers and development partners in the area of measurement of women's empowerment and their importance in determining the impact of agricultural development on nutrition and health outcomes
- Provide technical assistance for integrating gender in A4NH projects, including the development of quantitative and qualitative research protocols, instruments and documentation
- Conduct and coordinate strategic cross-cutting gender research on the interaction of gender with agriculturenutrition-health pathways
- Write and edit reports, papers, policy briefs, and journal articles related to gender-disaggregated agricultural statistics and research on gender and agriculture-nutrition-health pathways
- Monitor the integration of gender, equity and empowerment issues in A4NH research

Required Qualifications:

- PhD in Economics Agricultural Economics, International Development, International Relations with a minimum of 3 years of relevant work experience
- Experience in developing training materials on the collection and use of gender-disaggregated data and statistics
- Familiarity with food, nutrition, agricultural and rural development issues in developing countries
- Demonstrated ability to synthesize results from social science research for the development community, including policy makers, policy advisers, and researchers
- Excellent computer skills
- Ability to interact and communicate with diverse audiences
- Ability and willingness to travel nationally and internationally as necessary

Preferred Qualifications:

- Experience with multilateral organizations in collecting gender-disaggregated agricultural statistics
- Proficiency in a second language of the U.N. system.

Gender postdoctoral fellow

<u>Job Summary:</u> The CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) seeks a qualified candidate to serve as an Associate Research Fellow for a two-year, fixed term, renewable appointment. The Associate Research Fellow will assist in strengthening the gender analysis in value chain research in the CGIAR. The position will be based at the IFPRI headquarters in Washington DC and will require extensive travel overseas.

Recognizing that gender is one of the main ways that agriculture influences nutritional outcomes, the A4NH has initiated a series of cross-CRP activities to strengthen understanding of gender-agriculture-nutrition linkages, build capacity to do gender-nutrition research, and catalyze joint research across-CRPs. A4NH is working to integrate nutrition into CGIAR value chain research, where women's and men's roles in decision making, their level of participation, and asset ownership need to be taken into consideration to understand how value chain interventions may influence nutritional outcomes.

The Fellow will help bring these streams of work together, bringing a value-chain lens to the cross-CRP genderagriculture-nutrition work and a gender lens to the empirical research on assessing the impacts of value-chain interventions on nutrition and other key outcomes.

Essential Duties:

In close collaboration with gender specialists at partner CGIAR centers the Fellow will:

Support cross-CRP work on agriculture, gender, nutrition (20% of effort)

- Conduct an inventory and characterize "value chain for nutrition research" in the CGIAR, with particular attention to the integration of gender
- Contribute to the "value chains for nutrition" (VCN) evaluation framework, including the identification and development of gender-related indicators.
- Contribute to annual workshops, blogs, and other capacity building activities

Generate evidence on impacts of value chain interventions (80% of effort)

- Work with evaluation teams to integrate gender into the evaluations of 2-3 interventions in value chains for nutritious foods, using and adapting the VCN framework
- Depending on timing and project needs of evaluation teams, contribute to various aspects of the study design, implementation, and impact analysis
- Conduct research on gender and the impacts of value chain interventions on nutrition and other key development outcomes
- Produce reports, working papers, briefing notes, blog posts, and an average of at least two peer-reviewed journal articles per year
- Disseminate research findings to the CGIAR Gender and Agriculture Research Network as well as other researchers, development practitioners, and policymakers
- Present results at seminars, conferences, and other relevant forums

Required Qualifications:

- PhD in economics, agricultural economics, public policy, or related field
- Solid knowledge of the gender and intrahousehold literature
- Good knowledge of impact evaluation methods (quantitative and qualitative)
- Strong capabilities in quantitative data analysis including applied econometric analysis.
- Proficiency in STATA and other econometric/computational software packages.
- 1-2 years relevant experience (including doctoral research)
- Demonstrated ability to produce written technical reports and research publications for peer-reviewed journals
- Ability to work both independently and with interdisciplinary teams
- Fluency in spoken and written English at a professional level.

• Willingness to travel and spend a significant amount of time at other CGIAR centers or field sites (typically up to four months a year)

Preferred Qualifications:

- Familiarity with value chains and nutrition or health
- Familiarity with qualitative research methods
- Field experience in developing countries, preferably in Africa south of the Sahara and South Asia
- Experience in conducting impact evaluations
- Proficiency in an East African or South Asian language

Gender research assistants

<u>Job Summary:</u> The CGIAR Research Program for Agriculture for Nutrition and Health (A4NH) seeks a qualified candidate to serve as Research Assistant, Senior Research Assistant or Research Analyst based in an A4NH- affiliated Center in Africa or South Asia to support its cross-cutting gender program. This is a part-time (50% FTE), renewable appointment.

Essential Duties: Specific duties and responsibilities include but are not limited to:

- Assist in creating knowledge products for building awareness and capacity of researchers about gender issues in partner institutions, including other CGIAR Centers
- Assist in planning and conducting training workshops for partner institutions
- Assist in providing technical assistance for integrating gender in A4NH projects, including the development of quantitative and qualitative research protocols, instruments and documentation
- Conduct literature reviews and provide research assistance on the linkages between gender, agriculture, nutrition and health issues
- Identify needs and opportunities for addressing gender issues in ongoing and new research for A4NHmapped projects
- Support the initiation of new research by reviewing and synthesizing literature under the supervision of a research coordinator, research fellow, or senior research fellow;
- Help disseminate information about A4NH's work on gender to external and internal audiences
- Organize, clean, manipulate and analyze household data sets and qualitative data
- Prepare tables, graphs, and other outputs for reports
- Assist in the preparation of project deliverables, presentations, briefs and papers
- Other duties as assigned

Required Qualifications:

- Master's degree in Economics, Agricultural Economics, Sociology, Anthropology, Gender studies, Public Health, Nutrition, Epidemiology, Public Policy, or equivalent.
- Strong background in gender research in developing countries
- Demonstrated experience working with quantitative data (data cleaning, management, analysis, etc.)
- Familiarity with qualitative research methods
- Experience with STATA
- Ability to interact and communicate with diverse audiences
- Proficiency in Microsoft Word, Excel
- Fluency in written and spoken English
- Ability and willingness to travel nationally and internationally as necessary
- Ability to work in an interdisciplinary environment with multicultural teams
- Ability to work with minimal supervision
- Organized and self-motivated

Preferred skills:

- Proficiency in French and/or other African or South Asian languages
- Experience in proposal development and field research in developing countries
- Experience working with program implementers
- At least 2 years' experience working within a research capacity in agricultural development, nutrition, and/or health programs in developing countries, preferably in Africa or South Asia

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