



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



HORTICULTURE INNOVATION LAB

GENDER INTEGRATION IN USAID'S AGRICULTURAL RESEARCH INVESTMENTS: A SYNTHESIS OF KEY FINDINGS AND BEST PRACTICES

FINAL REPORT

FEED THE FUTURE ADVANCING WOMEN'S
EMPOWERMENT PROGRAM

November 2019



USAID
FROM THE AMERICAN PEOPLE

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The AWE Program enhances gender equality and women's empowerment in agriculture programs by providing targeted technical assistance to missions, implementing partners, BFS, and other USAID operating units to increase women's participation, productivity, profit, and benefit in agricultural systems. AWE is implemented by EnCompass LLC with ACDI/VOCA, MarketShare Associates, and FHI 360. www.agrilinks.org/activities/awe

ACRONYMS AND ABBREVIATIONS

Africa RISING	Africa Research In Sustainable Intensification for the Next Generation
ASMC	Appropriate Scale Mechanization Consortium
AWE	Feed the Future Advancing Women’s Empowerment Program
A-WEAI	Abbreviated Women’s Empowerment in Agriculture Index
BAU	Bangladesh Agricultural University
BFS	Bureau for Food Security
CGIAR	Consortium of International Agricultural Research Centers
CIMMYT	International Maize and Wheat Improvement Center
CSISA	Cereal Systems Initiative for South Asia
GRADA	Gender Responsive Agricultural Development Assessment
GREAT	Gender-responsive Researchers Equipped for Agricultural Transformation
GIZ	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> (German Society for International Cooperation – the German international development agency)
HICD	Human and Institutional Capacity Development
IFPRI	International Food and Policy Research Institute
IITA	International Institute of Tropical Agriculture
IL	Innovation Lab
ILRI	International Livestock Research Institute
IPM	Integrated Pest Management
MEL	Monitoring, Evaluation, and Learning
ORID	Objective, Reflective, Interpretive, Decisional
PI	Principal Investigator
SIAF	Sustainable Intensification Assessment Framework
USAID	United States Agency for International Development
WAgN	Women in Agriculture Network
WEAI	Women’s Empowerment in Agriculture Index
WEMA	Water Efficient Maize for Africa

EXECUTIVE SUMMARY

This report summarizes the **extent and nature of gender integration across 20 agricultural research Activities** funded through the United States Agency for International Development (USAID) Bureau for Food Security (BFS) Research Division. The findings **zoom out** to show the collective state of gender integration, along with lessons learned and key takeaways, and **zoom in** to explore in more detail what approaches are employed.

The core areas of inquiry focus on four broad themes, explored through review of key project documents, an in-person workshop, and key informant interviews with 38 directors, gender advisors, and other Activity staff:

1. **Gender integration in research practice**, including research tools and methods, analytical processes, key findings and their relevance to an Activity's core agricultural research objectives, and gender-specific research projects
2. **Operationalizing gender** through personnel (such as gender advisors), budget, and strategy
3. **Capacity development** to build skills in gender-sensitive and gender-specific research and to shape behaviors and processes that support effective and efficient integration
4. **Monitoring, evaluation, and learning (MEL)** to document results, capture and share learning, and apply insights to improve gender integration efforts

An index of resources ([Annex A](#)) catalogues the more than 30 tools and approaches for gender analysis, project design and planning, capacity development, and MEL that surfaced during this study. Four case studies ([Annex D](#)) provide detailed descriptions of gender integration in the Peanut, Horticulture, and Integrated Pest Management Innovation Labs and the Africa Research In Sustainable Intensification for the Next Generation (Africa RISING) Activity.

KEY FINDINGS

FINDING I: Gender integration in BFS-funded agricultural research Activities is widespread and diverse. A solid foundation exists, with a wealth of resources, expertise, gender-responsive research, and applied experience on which to build as USAID looks to further strengthen future gender integration efforts.

- Nearly all studied Activities (95 percent) were integrating some type of gender-specific data collection and analysis in their research and almost half (47 percent) had adopted an intentional, regular, and layered approach to developing gender capacity among staff and researchers.
- Almost all Activities in the sample had some type of gender expertise on which they were drawing to operationalize their gender integration efforts. The majority (85 percent) also had either a research-specific gender strategy or an Activity-wide gender strategy.
- All reviewed Activities were collecting and reporting on sex-disaggregated data (required by Feed the Future) and 60 percent were collecting additional gender-sensitive or gender-specific data or conducting special gender learning initiatives.

FINDING 2: Activity leadership widely recognized the value and relevance of gender integration to their research and its application, such as why it is central to human behavior, economics, technology adoption, exposure to pathogens, and so on.

Although this recognition was consistent across most Activities, the greatest concentration of weak gender integration, including management buy-in, was in “upstream” Activities. Capacity development was a foundational element in addressing biases against social science and a lack of awareness about gender norms’ relevance to research objectives. These efforts are important to capitalize on to encourage progression from informal, “light-touch” capacity development to more layered, higher-intensity capacity development that addresses a range of skill gaps.

FINDING 3: Balancing breadth versus depth was a common challenge, leading to significant variations in how gender was integrated across an Activity.

Attention to gender dropped in most cases when decision makers faced competing priorities and lacked clear expectations for gender integration from USAID. Several Activities had particularly compelling projects or countries where intentional gender integration extended deep into project implementation. In these examples, gender integration typically did not extend as systematically and impactfully across the broader Activity’s research portfolio, leaving it siloed in a few star examples. Gender integration was gradually deepened as a result of intentional shifts in awareness about the relevance of gender to core research objectives (Finding 2).

FINDING 4: Gender integration was under-resourced, especially in personnel.

Of the 55 percent of reviewed Activities that had a dedicated gender advisor, 82 percent were part time. The average gender advisor’s level of effort was budgeted at less than 25 percent, and almost half (45 percent) of part-time gender advisors were working with less than 10 percent level of effort. With such limited time and resources, gender integration tended to focus on “low-hanging fruit” (e.g., light-touch, targeted capacity development; guidance to research projects; and some data collection) instead of the harder-to-achieve, long-term, and more resource-intensive tasks (e.g., ongoing coaching, supporting the broader Activity’s research portfolio, and facilitating cross-project learning). Resource gaps related directly to balancing breadth versus depth (Finding 3) and systems and support to apply learning from gendered research and insights back into enhanced research design and practice (Finding 5).

FINDING 5: Applying gendered data and insights from research and practice was not automatic for most Activities.

Where gender-responsive research was occurring, most Activities had weak (or no) systems to manage iterative learning processes that fed back into research programming. Where these learning cycles did exist, they were highly beneficial in improving gender-responsive research practice and aiding decisions on how and where to invest resources for maximum benefits. More intentional action was needed to strengthen and connect planning, adaptive management, and MEL processes to ensure gender integration did not remain siloed within a few star examples of balancing breadth versus depth (Finding 3).

FINDING 6: There is a strong desire for greater cross-Activity collaboration so as not to “recreate the wheel” in tool development and primary research, and as a practical tactic, given tight resources.

Directors and gender advisors alike had few opportunities for cross-Activity collaboration, especially related to gender, which limited cross-Activity learning and sharing of promising tools and approaches. Activities expressed a desire to invest in a cross-Activity collaborative platform or mechanism (e.g., a community of practice, a portal for sharing tools) to support ongoing peer learning and exchange within the resource-constrained gender-in-research environment. Activities could adopt and adapt tools, share data, and as one director put it, “make different mistakes, not the same ones.” (See the [Looking Forward section](#) for relevant cross-Activity collaboration priorities.)

INTRODUCTION

The United States Agency for International Development (USAID) Bureau for Food Security (BFS) plays an important role in achieving the ambitious objectives of the Global Food Security Strategy¹ by leveraging critical long-term partnerships with research communities in the United States and overseas to catalyze ongoing scientific innovation in agriculture and promote evidence-based investments. Through its investments in Feed the Future Innovation Labs (ILs) and other research initiatives, BFS is supporting the development of technologies, research, and networks in crops, nutrients, and inputs. Gender roles and dynamics affect technologies' development, application, and benefits. Women, as well as men, play a significant role in agricultural and food systems—as producers, consumers, researchers, and businesspeople, but may face different constraints and opportunities in those roles. There have been limited formal efforts to integrate gender into research programming.

To understand these efforts and the environments that enable or hamper their success, BFS engaged the Feed the Future Advancing Women's Empowerment (AWE) Program to analyze the Research Division's portfolio, assess the extent and nature of gender integration in research investments, and capture good approaches and lessons learned. The analysis focused on institutional processes, personnel, research practice, and related themes. This study was a learning exercise, not an evaluation.

Balancing considerations of length of operation, commodity, geography, and nature of research (upstream vs. downstream), USAID selected 20 research Activities for inclusion—16 Feed the Future ILs and 4 other BFS-funded agricultural research investments, as follows:

1. Applied Wheat Genomics IL
2. Climate-Resilient Beans IL
3. Fish IL
4. Food Processing and Post-Harvest Handling IL
5. Genomics to Improve Poultry IL
6. Horticulture IL
7. Integrated Pest Management (IPM) IL
8. Legume Systems IL
9. Livestock Systems IL
10. Nutrition IL
11. Peanut IL
12. Post-Harvest Loss IL
13. Small-Scale Irrigation IL
14. Sorghum and Millet IL
15. Soybean Value Chain Research IL
16. Sustainable Intensification IL
17. Africa RISING
18. Cereal Systems Initiative for South Asia (CSISA)
19. Feed the Future Buena Milpa: MasAgro
20. Water Efficient Maize for Africa (WEMA)/TELA

Research methods included a **desk review** of key publicly available resources (e.g., annual reports, briefs, and online tools) and several internal USAID studies; **key informant interviews** with directors and gender advisors; and **in-person engagement** at a brief session during the Feed the Future IL

¹ <https://www.usaid.gov/what-we-do/agriculture-and-food-security/us-government-global-food-security-strategy>

Annual Meeting hosted in Washington, D.C., on September 18, 2019, which included a presentation of the research team’s preliminary insights and a series of peer exchanges for IL staff.

Key informant interviews proved to be an especially important source of information for this report. With permission, we have used respondents’ quotes to illustrate the unique insights that emerged. Interviews were conducted with representatives of all 20 Activities (with multiple interviews for some Activities to incorporate diverse perspectives). **Through 26 interviews, the research team interviewed 38 people—17 directors, 11 gender advisors, and 10 others** (e.g., assistant/deputy directors, program coordinators, and researchers).

Data were analyzed for patterns and key lessons, which are captured in this report. Four Activities were selected in consultation with USAID for case studies ([Annex D](#)). More complete details on the data collection and analysis methods (including data sources, consent process, data storage, and key informant interview guides) are synthesized in a separate analysis plan, which USAID approved in July. Research was conducted from July to September, and analysis and report writing occurred in October and November.

SYNTHESIS OF GENDER INTEGRATION IN RESEARCH PROGRAMMING

OVERVIEW LANDSCAPE

This section discusses the extent and nature of gender integration across 20 agricultural research Activities. The findings **zoom out** to show the collective state of gender integration along with lessons learned and key takeaways and **zoom in** to explore in more detail what approaches are being employed. Where there are results from these approaches, they are captured and explained to enhance learning around what works and the perceived and real benefits of investing in gender integration in agricultural research.

THE CURRENT EXTENT AND NATURE OF GENDER INTEGRATION

- The majority of studied Activities (95 percent) integrated gender-specific data collection and analysis of some kind into their research.² There were varying levels of quality, integration of findings back into adapted design or cross-Activity decisions, and influence. Activities investing in gender-integrated research overwhelmingly validated the insights as important and useful.
- Most Activities had critical elements necessary for operationalizing gender integration in their institutions, including human resources, budget, and strategy. However, these elements did not always work harmoniously. Typically, under-resourcing in one area led to deficits in others.

² Key informant interviews asked Activity respondents to describe the types of gender-specific and sex-disaggregated data captured for research and/or monitoring and evaluation purposes and the methods used, and to share insights from that data collection. While some Activities are integrating gender analysis tools/frameworks into their research methods, others are collecting gender-specific data as part of their research to better understand gender differences that affect their research and its application.

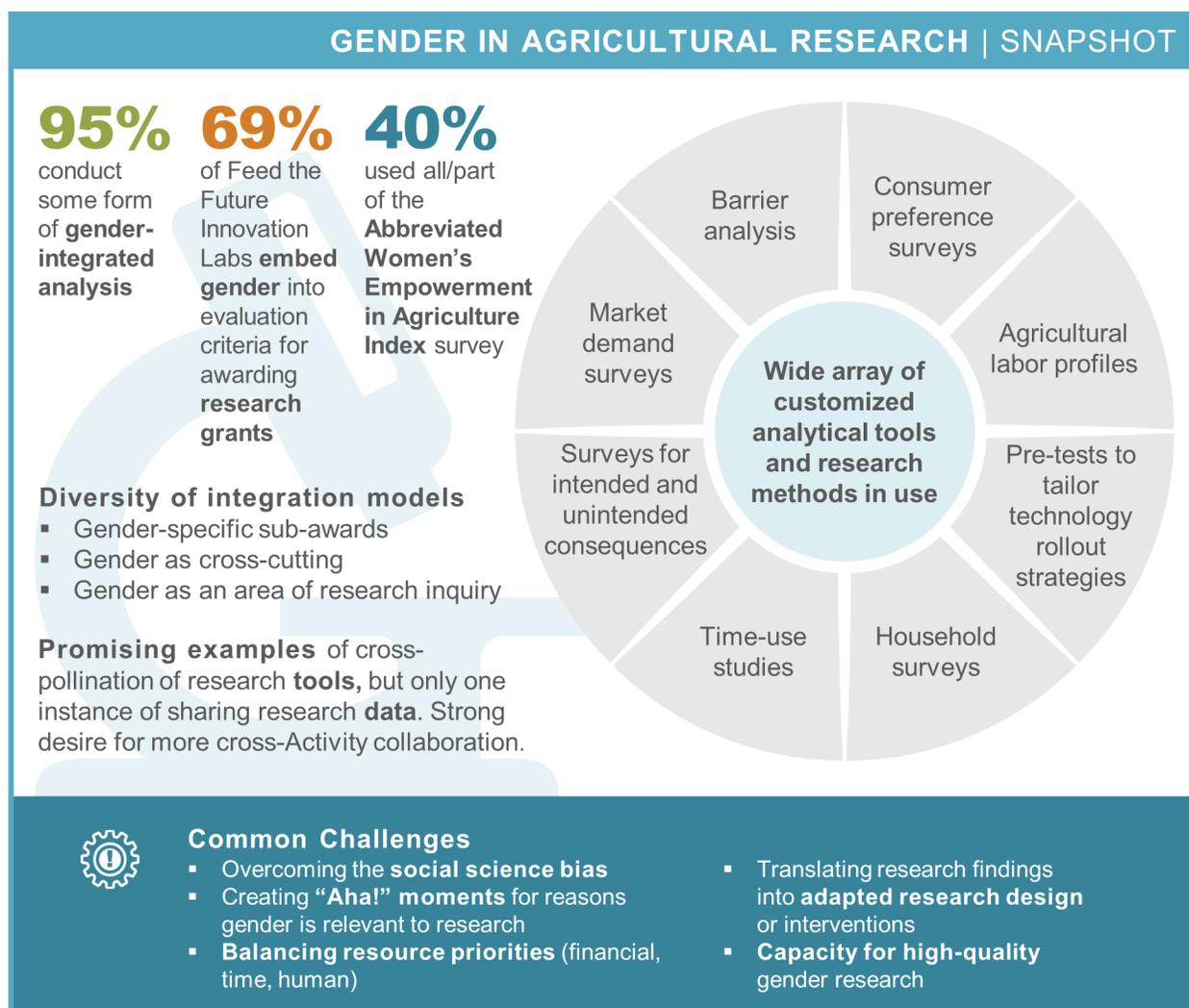
- Nearly all Activities had some sort of gender expertise on which they relied to operationalize gender integration in their research and capacity development. In resource-constrained settings, Activities were creatively seeking solutions to resource opportunistic forms of gender expertise, including drawing on collaboration with other institutions and consultants to benefit from their expertise, tools, and approaches.
- Gender integration efforts were under-resourced, including low levels of effort for dedicated gender advisors. Of the 55 percent of Activities that had a dedicated gender advisor, 82 percent were part-time. Nearly half of part-time gender advisors had less than 10 percent level of effort, which tended to provide enough time only to address “low-hanging fruit.”
- Almost half of the studied Activities (47 percent) were taking a more intensive, intentional approach to gender capacity development, such as layering a mix of workshops, ongoing coaching, webinars, and capacity assessments with consistent engagement and skills-building across a range of capacities. The remainder (53 percent) had either none at all (16 percent) or a very light-touch, informal approach (37 percent), such as a one-time introductory workshop at the beginning of the project. Many endorsed capacity development as a necessary foundation for improved gender integration in research practice by raising awareness of gender’s relevance to the research objectives, countering biases against social science, and addressing skills gaps, especially those related to integrating gender into commodity-specific scientific research and analysis.
- More than half of the Activities (60 percent) collected custom, internal gender monitoring and evaluation (M&E) data and special gender learning studies. Managers and researchers recognized the value of qualitative methods in assessing underlying gender dynamics and were actively using mixed-methods approaches.
- Applying gendered data and insights from research and practice was not automatic for most Activities, with weak (or no) systems in place to manage this iterative process. Where they existed, learning cycles that fed back into programming were highly beneficial in improving gender-responsive research practice.

Across the set of 20 Activities, directors and gender advisors recognized gender integration as important and relevant to their work. What was less clear to directors was how Activities could effectively integrate gender, given competing priorities and limited resources to achieve the greatest results. Many of these respondents discussed focusing on breadth versus depth, and the tradeoffs and benefits of each focus. Despite the lack of guidance or a clear understanding of “what works” to promote effective gender integration, many Activities were actively moving forward with approaches to gender integration in research; operationalizing gender through human resources, budget, and strategy; gender capacity development; and monitoring, evaluation, and learning (MEL).

GENDER INTEGRATION IN RESEARCH PRACTICE

CURRENT STATE OF PRACTICE

Exhibit 1: Gender in agricultural research – snapshot



LESSONS LEARNED/KEY TAKEAWAYS

The snapshot above ([Exhibit 1](#)) illustrates that gender integration in agricultural research has been customized and conducted to a widespread degree, albeit with varying levels of quality, influence, and silos within Activities. Activities that were investing in gender-integrated research overwhelmingly validated the insights as important and useful. However, many reported challenges applying gender-related learning back into the Activity's work, balancing complex resource prioritization needs, and a desire for greater cross-IL collaboration so as not to “recreate the wheel” in tools and primary research each time.

The following are additional high-level insights:

1. **It is critical to link gender to achieving research goals from the outset.** Many directors and gender advisors emphasized the need to frame gender in a highly contextualized, technical way from the

beginning. The argument that gender equity inherently matters does not connect that concept to the work of a research-focused audience; rather, the argument that productivity matters and gender matters to productivity convinces researchers of the value of gender integration in their work. Having hard evidence (supported by gender-integrated primary research or leveraging of secondary data) is an important part of that message, and building consensus through participatory methods is key.

[W]hen researchers are able to see why [gender integration] questions or why potentially modifying the way they approach a certain activity, how that ends up by producing a better technology that's going to be used, hopefully adopted more frequently or used more frequently, then I think when you're able to create that linkage, [...] researchers then become much more invested themselves in that process because they see why it practically matters. –Program coordinator, Sorghum and Millet IL

2. **The social–biophysical science divide is real.** Many flagged overcoming bias against social science research more broadly (related to gender, consumer preferences, and qualitative research in general) as a common constraint in resourcing social science research as well as in valuing the findings. The [Gender Capacity Development section](#) of this report includes a few examples of tactics to mitigate this divide.
3. **Gender-sensitive research does not necessarily require a standalone study.** Resource-constrained Activities can look for ways to integrate gender into existing planned research studies by adding targeted questions. For example, many Activities in this study took elements from the Women's Empowerment in Agriculture Index (WEAI) and integrated pieces into other studies. The involvement of gender advisors is one key to ensuring best practices in gender-sensitive research are still followed (e.g., who asks the questions, how the research is analyzed).

... very often it's more about developing good tools that consider gender, and even without more money or just a little bit more money, you can collect good data that can help you to gain new insights. Often, it's about rethinking what you are doing anyway in order to achieve more gender integration. –Gender advisor, Africa RISING

4. **Gender integration in upstream Activities is challenging.** The level of gender integration in actual research was understandably much more limited among upstream than downstream Activities. Yet, several directors of more upstream-focused Activities also reinforced that understanding gender was an important aspect of the ultimate success of their work's ability to be successfully picked up by a downstream project.

Our intent is to have research that will set the stage for some other groups that will scale. –Director, Legume Systems IL

5. **Connecting the dots between research, reflection, adaptation, and application seems to be the Activities' "Achilles' heel."** Establishing a connection between conducting research and applying the findings—with management, learning, and planning processes that enable that action—was a common challenge. Examples of gender-focused research studies were more prevalent than examples of how gender-specific findings were used to shape Activities' planning, design, and decisions. Challenges in timing can also inhibit opportunities to connect the dots. Another Activity

reported how project planning had to move forward without incorporating insights from research because a wide-scale household survey took too long to analyze, and the moment for integration was lost. The [Resourcing and Operationalizing Gender](#) and [Monitoring, Evaluation, and Learning sections](#) of this report discuss several promising planning- and MEL-related processes select Activities have found helpful in addressing these challenges.

PROMISING APPROACHES

A. GENDER INTEGRATION IN DATA COLLECTION AND ANALYSIS

As this section highlights, Activities were using a **wide array of analytical tools/practices** (see also [Annex A](#)), many tailored to the specific agricultural research context:

- I. One of the most common tools for collecting gender data was **adapting the WEAI**. Eight Activities (40 percent) specifically referenced using the WEAI or the Abbreviated WEAI (A-WEAI),³ in part or in its entirety, as a foundational survey design and/or analysis tool to reveal gender-specific insights on how decision making, access to resources, control over land, and other empowerment domains would affect their specific research areas. For example, the [Horticulture IL](#) conducted the A-WEAI in Honduras and—like the [Post-Harvest Loss IL](#), [Nutrition IL](#), and others—incorporated specific WEAI questions into other (non-gender-specific) surveys to enhance gender insights. Findings “set the scene for understanding” and design of phase II of the Post-Harvest Loss IL. The [Small-Scale Irrigation IL](#) used a customized A-WEAI (see the box on the next page), and the Soybean IL added four soybean-specific modules.
 - Most Activities reported conducting the survey only once, as a diagnostic tool. The [IPM IL](#) and [Soybean IL](#) were unique in using it through two waves of data collection. The IPM IL incorporated specific A-WEAI indicators or domains into baseline and endline surveys. The Soybean IL conducted two waves of surveys in Ghana and Mozambique,⁴ and found women accessed fertilizers through their husbands, so the intra-household gender dynamics that influenced purchases of agricultural inputs (e.g., fertilizers) and, ultimately, productivity gains had to be considered. The second wave was connected to capturing impact on WEAI domains from the IL’s distribution of soybean success kits (which contained seed, inoculum, and fertilizer), and found positive productivity gains among women farmers who had received the kits. As a strong example of cross-Activity sharing of data around gender, the [Climate-Resilient Beans IL](#) leveraged the results of the Soybean IL’s research in Mozambique.

³ The WEAI is a survey-based index that assesses the degree to which males and females are empowered in five domains of empowerment in agriculture: decisions about agricultural production, access to and decision-making power over productive resources, control over use of income, leadership in the community, and time use. The WEAI also consists of a sub-index, the Gender Parity Index, which measures women’s empowerment relative to men in their households. The A-WEAI is a shorter, more streamlined form of the WEAI. For more information about the WEAI, see <http://weai.ifpri.info>.

⁴ For results from the WEAI+ in Ghana, see <http://soybeaninnovationlab.illinois.edu/sites/soybeaninnovationlab.illinois.edu/files/SIL%20Gender%20Equity%20Research%20Brief.pdf>. For results from Mozambique, see <http://soybeaninnovationlab.illinois.edu/sites/soybeaninnovationlab.illinois.edu/files/Research%20in%20Action%20-%20Soybean%20Seed%20Access%20and%20Practice.pdf>

Enhanced Performance through Gender Research Insights

As part of the quantitative and qualitative research, the **Small-Scale Irrigation IL** ran a customized version of the A-WEAI, tailored for small-scale irrigation. The director shared how the insights from data on labor and opportunity costs for women and children fed into the economic modelling and “*really changed fundamentally, the results of our research because we were looking at things from a very different point of view. That drove a shift in the types of technologies that the lab was looking at itself.*” This led to enhanced focus on mechanized technologies, instead of manual ones. These data-driven inputs for evidence-based decision making were situated within an IL-wide management approach to valuing gender integration as core, which is seen as critical. This includes a framework brief, developed consultatively during the first year, on the reasons gender matters to the Small-Scale Irrigation IL, plus consistent reinforcement through messaging and information sharing at annual meetings and in ongoing internal communications.

- **Africa RISING’s** gender advisor in Ethiopia leveraged the WEAI domains to inform a custom-designed composite Women’s Empowerment Index that, along with other socioeconomic variables and data from interviews with 230 women and 16 focus groups with men and women, was analyzed to assess women’s empowerment in agricultural research, and how specific individual empowerment indicators were associated with women’s participation in each stage of the agricultural research process.⁵

Autonomy over plot management, input into production decision making, membership in farmers group, and ability to speak in public – results showed that all these significantly influence the ability of women to participate in a research activity. All these connect to women’s adoption of technologies, how to use credit/income, etc. So, we are looking at how can we integrate activities that develop women’s confidence, and increase access to information and extension. –Gender advisor, Africa RISING – Ethiopia

2. Activities have developed a diverse array of small-scale, custom consumer preference surveys to inform technology research and development processes, adoption initiatives, advisory messaging, and even upstream varietal selection. Most Activities used mixed methods and many were not explicitly gender studies, but the studies were designed to produce sex-disaggregated findings with additional questions (e.g., norms regarding socially acceptable functions for women) or methods (e.g., single-sex focus group discussions) that intentionally explored gender dynamics. Examples include:

- The **Climate-Resilient Beans IL** conducted a sex-disaggregated consumer preference survey on beans as part of the breeding design and selection process. By doing so, they learned that men and women had very different trait preferences, and the assumption that the traditional variety was always preferred was sometimes unfounded (e.g., in Mozambique). They also discovered that women’s farmer groups were fundamental decision makers in selecting which

⁵ Mulema, Annet A., W. Jogo, E. Dantew, K. Mekonnen & P. Thorne (2019). Women farmers’ participation in the agricultural research process: implications for agricultural sustainability in Ethiopia, *International Journal of Agricultural Sustainability*. <https://doi.org/10.1080/14735903.2019.1569578>

variety was doing well, and engaging them had been key in the participatory process of variety selection.

- The [Livestock Systems IL](#) conducted a study on yogurt storage containers in Ethiopia that explored questions around food safety and end-user/consumer preferences to reveal any potential barriers to future technology adoption. They found that traditional wooden containers were as effective at hygienic milk storage as the stainless steel containers. Interviews and focus group discussions with women revealed surprising insights: the stainless steel container did not keep the yogurt as cool; stainless steel containers were easier to use than traditional gourds, but took months to make yogurt. The elaborate decorations on the gourds had social and religious significance, so women did not feel the religious authorities would sanction the use of the stainless steel containers.

There are all these peripheral aspects, which are fundamentally important to the women, which we had no clue about ... focusing on the interest and the needs of the women helped us to see aspects that were important to them that people like us would probably never think about ... which are critical to adoption. –Director, Livestock Systems IL

- In Nepal, a significant feminization of agriculture is underway due to widespread male migration; yet, service providers and machinery manufacturers have not fully shifted their business models to adapt to the unique needs and demands of their growing female client base. As part of a broader strategy to build the business case for more informed targeting and service offerings, [CSISA](#) conducted gender-sensitive consumer-demand and user-preference surveys on machinery (e.g., backpack sprayers) to support firms in discovering incentives to overcome potential access and/or technology design issues for this new client base.
3. A few Activities described collecting, analyzing, and applying gender differentiated data as part of strengthening implementation. For example:
- In Senegal, the [Food Processing and Post-Harvest Handling IL](#) is trying to do more gender-differentiated analysis related to aflatoxin. The director observed “lower aflatoxin levels in households where women were more involved in post-harvest activities, so [we] are now trying to get more women involved, targeting households where females are managing the post-harvest activities.”
 - To connect the dots between research, reflection, and application, [CSISA](#) regularly conducts small-scale surveys to test messaging or demand-related assumptions before they launch (or support others to roll out) an activity. This is both a research activity (the survey) and a process (pilot small, test, adapt, and roll out). For example, CSISA conducts small-scale mixed- and single-gender focus group discussions to pilot and refine mass media agriculture advisory messages in Bangladesh before launching, and tailors the final messaging (and the messenger), drawing on other gender-sensitive insights, to maximize the impact based on the audience.

Spotlight on WEMA/TELA: How Gender-Sensitive Research Revealed Critical Determinants for Adoption and How Frequent Reflect-and-Adapt Processes Supported Success

WEMA/TELA in Ethiopia started with gender-integrated adoption studies and discovered that one of the contributing factors that drove adoption was women's control of resources in the household. Other factors they thought would have a bigger influence (e.g., land size, household size, education, and access to extension information) contributed to adoption, but not to the speed of adoption. A key study recommendation was that the Activity support measures that would encourage women to control household resources, particularly around farm resource allocation.* They conducted additional gender-sensitive studies on preferences to identify desirable traits, and found that women liked the "staying green" phenotype trait (e.g., when the maize matures and is ready for harvest, the plant stays green) of this hybrid maize seed primarily because their small ruminants could feed on the leaves. A pre-test also identified technology deployment features, such as low-literacy forms of information given over multiple seasons, which were more appropriate for women. These findings supported progress in adoption rates for drought-tolerant maize; drought-resistant TEGO hybrid maize developed and promoted by WEMA/TELA had an adoption rate of 26 percent within 3 years.

* For more information, visit <https://www.aatf-africa.org/wp-content/uploads/2019/08/George-Marechera-et-al-July-2019.pdf>.

B. EMBEDDING GENDER IN RESEARCH PROJECT DESIGN

The project design stage (whether for Activities structured in a consortium model, a competitive projects model, or a variant) was overwhelmingly referenced as a key entry point for meaningful and effective gender integration. Directors and gender advisors alike frequently cited this point as a critical moment for engagement of gender experts. This included providing feedback to applicants/researchers, engaging in co-design, identifying appropriate indicators, and establishing relationships with principal investigators (PIs) and partners that enabled more iterative technical assistance.

A majority of reviewed Feed the Future ILs (69 percent⁶) reported embedding **gender evaluation criteria for awarding research grants**. However, simply providing criteria is not enough to ensure effective gender integration. Several respondents noted it often took several rounds of revisions to get a good-quality result, and once projects were awarded, ongoing capacity development and technical support were necessary.

Common guidelines provided to applicants included the following:

- A series of questions requiring proposals to describe gender issues relevant to the research and context, and how they will be addressed
- A requirement to include gender data collection or a gender analysis in plans and funding requests
- Guidance for applicants on issues to consider by research areas
- Examples of potential gender M&E indicators

⁶ Only Feed the Future ILs are included in this calculation, given the unique nature of the four other Activities in the study.

- A requirement to propose gender indicators, include gender in the MEL plan, and/or conduct gender assessments/impact evaluations of the proposed research, interventions, or technologies
- Evaluation criteria that explicitly included gender in the scoring or assessment details

In addition to the spotlight below, [Annex B](#) provides specific language and examples of project evaluation criteria provided by upstream and downstream Activities.

Spotlight on Sorghum and Millet IL: Excerpt from Gender Integration Guidance to Applicants

“Each proposal is expected to describe the gender issues the research team anticipates encountering, how they will be addressed and how projects will promote equitable participation by women. All projects have gender implications, but some will require greater attention than others [sic] those that are closer to the delivery of new technologies, knowledge, production systems or products.”

To support high-quality responses, the guidance provides insights on issues to consider by research areas, as well as potential indicators. For example, “genetic enhancement” issues include the following:

- Varieties and volumes of sorghum/millet produced and for what purpose (e.g., home consumption, brewing, local sale, commercial sale).
- Cultural norms regarding the type of work men and women do during the cropping season. This is often defined according to the physical demands of the task (e.g., men perform land clearing and plowing; women perform weeding).
- Some of the traits that plant breeders developed might be gender neutral (e.g., those that enhance host plant’s resistance to stresses), whereas nutritional, processing, and organoleptic traits might be more important to women. Certain traits might have positive or negative effects (e.g., varieties with greater resistance to weeds might reduce the time required for women to engage in weeding, which could be positive if those resources were captured in other household activities or negative if weeding is the woman’s wage-earning activity).
- Roles in seed selection, seed keeping, and seed selling/distribution.

Access the full guidelines at <https://www.k-state.edu/smil/docs/gender/SMIL%20Gender%20Guidelines%20for%20Proposal%20Development.pdf>

Other Project Planning Tools: Several Activities had standardized planning tools, beyond guidance, to aid researchers in an interactive, iterative process of considering and integrating gender into project design and/or work planning. See the section on [Resourcing and Operationalizing Gender](#) for descriptions of multiple tools and how Activities used them.

C. GENDER-INTEGRATED RESEARCH PROJECTS

There are promising examples of research projects that demonstrated strong attention to and engagement of women in agricultural systems and the gender dynamics that shape benefits and empowerment from agricultural technologies. This is particularly evident in Activities that are targeting commodities or functions in which women are heavily involved and in Activities that implement more downstream-focused, field-based activities to introduce and commercialize technologies into the market.

- [CSISA](#) and the [Small-Scale Irrigation IL](#) both engaged with the private sector to introduce and scale new technologies into commercial markets. Each worked with agribusinesses to develop and promote business cases for women to enhance awareness of women’s role as key end users of technology, and provide the evidence base to improve greater customization of product development, service provision packages, and marketing.
- Around the world, the [Soybean IL](#) is piloting and promoting multi-use threshers that are being built locally through partnerships with commercial entities. They have identified a lighter, less expensive tool that women can more easily hold and operate, potentially reducing drudgery as well as workload for women and increasing their opportunities to be employed in building the threshers. In Ghana, there are the beginnings of intentional efforts to pursue this opportunity to promote women in nontraditional roles, contributing to the reshaping of restrictive gender norms.
- The nature of the commodity or target stage of a value chain can also lead an Activity toward greater gender integration. For example, women are heavily involved in livestock systems, but often in highly gendered roles that revolve around care and household milk consumption. In Rwanda, the [Livestock Systems IL](#) focused on increasing animal-source food consumption among pregnant and lactating women, and looked at how to increase women’s engagement and leadership in dairy cooperatives. In Nepal, the IL trained women in rural areas to become animal health workers and disease sentries, which helped fend off an epidemic. Their work led to additional funding from the International Development Research Centre to specifically examine women’s empowerment in livestock value chains in Nepal, Senegal, and Uganda.

Identifying and Supporting Entry Points in Commercialization Pathways for Women-Owned Businesses

As part of its product deployment and associated market analyses, the [Food Processing and Post-Harvest Handling IL](#) is exploring and promoting entry points for clusters of women-owned food processing enterprises in Kenya and Senegal. The IL uses a “hub-and-spoke” model to disseminate food processing and nutrition technologies (e.g. dryer and dehydration devices) while also strengthening food processing businesses. The “hub” is a central food technology-based facility housed at a local institution to serve the functions of technical assistance, research and development, business networks, and access to investment to women associations, youth groups, and/or women-owned enterprises, or “spokes”. These “spokes”, or enterprises, process goods using technologies developed at the “hubs”, while also innovating themselves (e.g. bringing new product concept ideas for research and development).

D. STANDALONE GENDER RESEARCH PROJECTS

A number of Activities entered into research projects dedicated to exploring a gender-specific research question or thematic area. These include the [Peanut IL](#) (see the box below and the case study in [Annex D](#)); the [Sustainable Intensification IL](#), which implements a Women in Agriculture Network (WAgN) project focused on vegetable production and marketing in Cambodia; and the [Horticulture IL](#) (see the case study in [Annex D](#)). The [Fish IL](#) was just starting up and thus had not finalized its research projects, but one of its quick-start projects was assessing gender-specific facilitators and barriers to aquaculture and fish consumption in Zambia. The [Legume Systems IL](#) was in the process of selecting sub-awards, and had concrete plans to allocate research funds for several deep-dive gender projects layering Feed the

Future gender learning questions into the overall IL's theory of change and identifying key gender dimensions with which particular projects were already engaging.

Standalone gender research projects offer opportunities for dedicated research budgets and specialists, alignment with USAID on prioritization of these resources, raising the profile of gender-specific work, and supporting greater understanding of the link between gender integration and the key research objectives. A separate call for gender-specific research diversifies the portfolio of applicant institutions and intentionally broadens an Activity's networks.

Gender-focused research projects can pose some risks to the goal of gender integration for an Activity. They can increase the tendency for siloed research because other research streams may perceive that funding gender-focused research means that they themselves are not expected to consider it. In these cases, a lack of budget is perceived to indicate a lack of gender scope. . To manage these concerns, the [Peanut IL](#) is launching Activity-wide capacity development, with an incentive fund to resource targeted enhancements via the Gender-responsive Researchers Equipped for Agriculture Transformation (GREAT) program (see the case study in [Annex D](#)). To avoid siloing, the [Sustainable Intensification IL](#) requires all its projects to use the Sustainable Intensification Assessment Framework (SIAF), identify gender considerations, and have a gender focal point.

One problem with mainstreaming that you definitely see with gender is that it can get lost when it's viewed as a cross-cutting theme, so I think that elevating it to the position of a research area equivalent to our breeding and genomics research efforts is helpful for elevating the issue. Then, of course it's enabled us to channel a quarter of our research budget or more into gender-specific research projects. –Director, Peanut IL

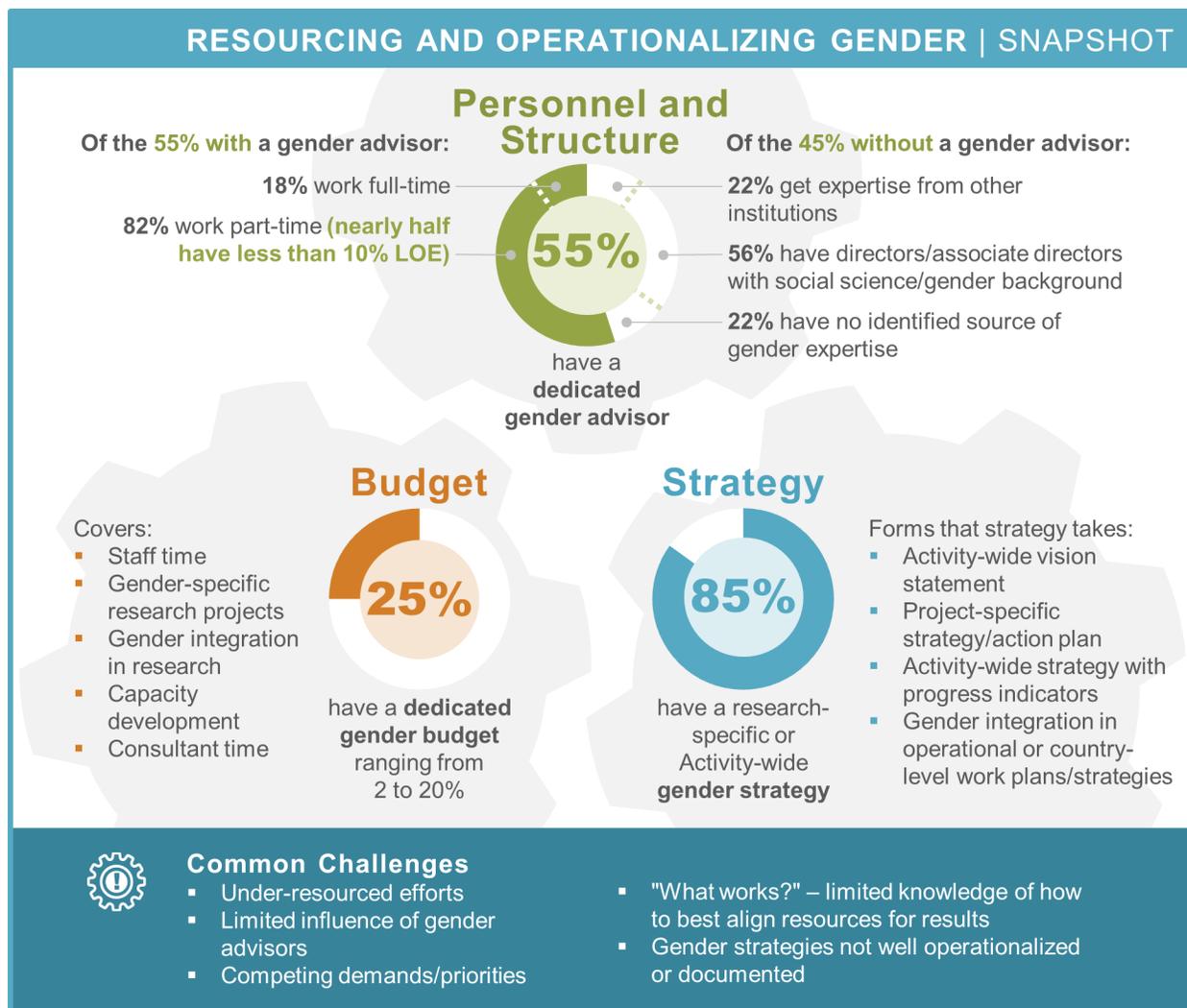
Gendered Research in Ghana: The Peanut IL's Research on Women's Time Poverty and Aggregator Models

The [Peanut IL](#) awarded five standalone research projects in three countries under its gender and youth area of research inquiry (with youth projects including gender dimensions). In Ghana, a 3.5-year, \$437,000 project explored time poverty among female peanut producers, an area of particular importance because peanut production is labor intensive. The study included testing the efficacy of time-saving technologies/methods and capacity development in gender-sensitive research with a local institution. A second project (4 years, \$600,000) involved a randomized control trial to assess gendered outcomes of aggregator models, often used to link peanut farmers to high-value markets.

RESOURCING AND OPERATIONALIZING GENDER

CURRENT STATE OF PRACTICE

Exhibit 2: Resourcing and operationalizing gender – snapshot



LESSONS LEARNED/KEY TAKEAWAYS

As the snapshot above illustrates ([Exhibit 2](#)), gender integration was under-resourced. Only a quarter of Activities had a dedicated a minimal budget to gender, and of the Activities with a dedicated part-time gender advisor, nearly half had less than 10 percent level of effort. Despite under-resourced efforts, many Activities creatively employed opportunistic operational and resource models to address gender integration in their research and practice, examples of which are presented below.

Other key takeaways include the following:

1. **Institutional settings need a combination of human resources, budget, and strategy to effectively operationalize gender and realize results.** Directors and gender advisors acknowledged that these three elements were critical steps in a process toward improved gender

integration in their Activities. Many also acknowledged that these elements were interlinked, reporting that under-resourcing in one area often led to deficits in others.

Gender integration is not a state, it's a process. –Gender advisor, Africa RISING

It is not necessarily the end, but it is the means. It's not really to get there, it's how you get there and with whom do you get there. –Director, Buena Milpa

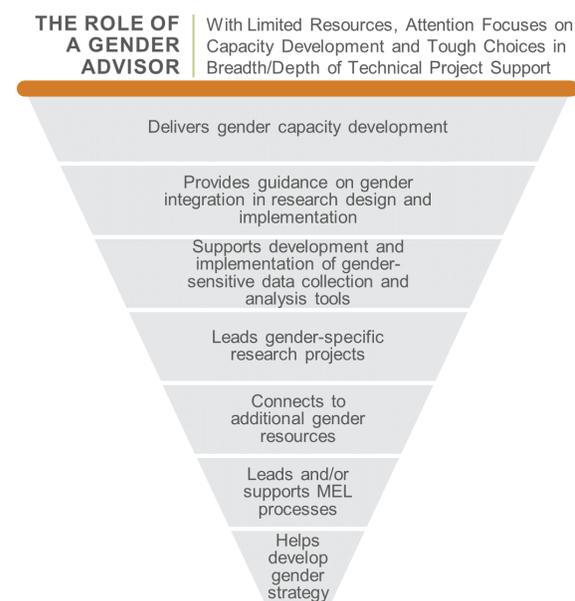
2. **Gender advisors can exert more influence if they are a core part of the management team.** Although limited influence over Activity-wide gender planning and budgeting was a common challenge gender advisors experienced, a few counterpoints to that experience were when gender advisors were situated within core or management teams, which gave them direct access to Activity-wide decision making.
3. **Sourcing gender expertise from other institutions allows Activities to capitalize on broader sets of resources, tools, and capacities.** All but two of the interviewed Activities mentioned relying on outside gender expertise, most often sourced from in-country experts and institutions, to amplify their gender work by drawing on existing resources, tools, and capacities that came through collaboration with outside gender experts.
4. **Recruiting and retaining in-country gender expertise is difficult.** While many respondents expressed the value in having in-country gender experts, there were real challenges to the recruitment and retention of local gender advisors. Some expressed that these local experts were difficult to source and that bringing on non-gender experts in gender advisory roles often required more extensive capacity development and technical oversight. Two Activities also remarked that delayed funding obligations became a major impediment to retaining gender advisors, either because of the short-term nature of the work or the lack of job security.
5. **Attention to gender drops with competing priorities and without clear expectations for gender integration.** More than a third of Activities stated that gender integration was supported but under-resourced because of competing demands. Areas that required a dedicated percentage of the award budget (e.g., capacity development) tended to be prioritized over gender. A few Activity directors noted that returns on gender integration efforts were often not realized in the short term, which disincentivized them from spending resources on gender efforts in lieu of quicker-return investments that demonstrated progress (e.g., training numbers). Because few Activities were capturing results around “what works” in gender integration in their institutions, there is a dearth of evidence on how to focus limited resources to achieve the greatest results and to support greater investment in gender integration efforts.

If we're putting resources towards gender or youth or ag-economics or any of the other things, it can feel like we're taking away from other activities that more on the technical side where most of our PIs fall in ... It's a really little pie and big objectives. –Assistant director, Post-Harvest Loss IL

6. **With limited resources, gender efforts tend to focus on the “low-hanging fruit.”**

[Exhibit 3](#) illustrates the tasks gender advisors cited most frequently, in descending order. With limited level of effort and resources, gender advisors reported focusing on the “low-hanging fruit,” such as targeted capacity development (e.g., mostly training and gender onboarding, and some assistance to local partners in developing gender-sensitive institutional strengthening plans), guidance to research projects, and some data collection. They noted a lack of necessary time to follow up, provide additional support, conduct cross-project analysis, or support Activity-wide MEL processes and strategy development. Where there were substantial level of effort and resources for gender integration, efforts tended to expand into harder-to-achieve and more resource-intensive tasks that were less frequently cited, such as connecting teams to additional gender resources, leading and/or supporting MEL processes, and helping develop and implement a gender strategy.

Exhibit 3: The role of a gender advisor



We’re a small staff, so everyone is wearing the different hats, and because of that, we are being as proactive as we can and trying to also be as creative and focused as we can to as effectively integrate gender into our overall broader research program as possible. But because time resources are limited and financial resources are limited, that certainly means that the level of impact and just how deeply we can go in on certain areas, I think is ... very limited. –Program coordinator, Sorghum and Millet IL

PROMISING APPROACHES

A. COMMON APPROACHES IN RESOURCING GENDER – PERSONNEL/STRUCTURE

Activities approached resourcing gender in many ways. Although no one model stands out as the right fit for every Activity, by taking stock of the varied approaches, this study explored how they were employed and what Activities achieved as a result. These approaches are not mutually exclusive (e.g., one Activity often employed more than one approach at a time), and they are not static (some Activities evolved their approaches over time). The categorizations captured in [Exhibit 5](#) are the predominant approaches that arose in the landscape analysis, in descending order of those most commonly cited. With each approach are benefits directly expressed or inferred from conversations with Activity key informants. Benefits surfaced from conversations, but many were perceived benefits, as most Activities could not provide tangible results associated with the approach and not all benefits (perceived or real) were widely endorsed or validated.

Exhibit 4: Common resource models employed by Activities

<p>9 Activities</p>	<p>Country/Project Gender Focal Points</p> <ul style="list-style-type: none"> ▪ Allows for more sustained, intensive engagement in research processes ▪ Allows for more ongoing capacity-development efforts for research teams and partners
<p>Activity-Wide Gender Advisor in Management Entity or Core</p> <ul style="list-style-type: none"> ▪ Facilitates Activity-wide gender standardization, knowledge management, and exchange ▪ Creates a central point for researchers/PIs to source technical assistance ▪ Ensures sound technical oversight and guidance for research teams ▪ Generally results in more comprehensive, intensive gender integration efforts ▪ Generally more able to exert influence in decision making and priority setting 	<p>8 Activities</p>
<p>5 Activities</p>	<p>Director/Associate Director Provides Gender/Social Science Lens</p> <ul style="list-style-type: none"> ▪ Resource efficiencies ▪ Influential in decision making and priority setting ▪ Can bring in lens, and commit resources opportunistically
<p>Activity-Wide Gender Advisor + Country/Project Focal Points</p> <ul style="list-style-type: none"> ▪ Sources local, contextually relevant knowledge and connections ▪ Builds in-country gender experts' capacity that can be tapped ▪ Improves knowledge transfer 	<p>4 Activities</p>
<p>4 Activities</p>	<p>Shared Gender Advisor</p> <ul style="list-style-type: none"> ▪ Cross-pollination of tools, resources, and processes, including any learning ▪ Immediate connections to other research Activities ▪ Resource efficiencies
<p>Gender + Roles (+ Youth + Social Inclusion + Training/Facilitation)</p> <ul style="list-style-type: none"> ▪ Allows for a more intersectional lens when looking at gender dynamics ▪ Broadens capacities of research teams to explore how layered identities influence research objectives 	<p>4 Activities</p>
<p>4 Activities</p>	<p>Gender Expert on Advisory Committee</p> <ul style="list-style-type: none"> ▪ Light-touch engagement, but at strategic points ▪ Generally influential in decision making and priority setting ▪ Connections to other Activities and experts
<p>Sourcing Gender Expertise from Other Institutions</p> <ul style="list-style-type: none"> ▪ Resource efficiencies ▪ Leverages knowledge, tools, and processes without having to "reinvent the wheel" ▪ Expands pool of potential collaborators 	<p>2 Activities</p>

Shared gender advisors promote cross-pollination of tools and processes. The Soybean IL, managed by Mississippi State University, engaged a gender advisor to provide gender integration support to the IL. In 2016, the advisor launched a tool to assess the gender responsiveness within Soybean IL—the Gender Responsive Agricultural Development Assessment for the Soybean IL (GRADA). The Fish IL, awarded to Mississippi State University in September 2018, has adapted the tool for aquaculture and fisheries (calling it the “GRADA-FIL”) by engaging the same gender advisor, who will roll it out with new research awards. (See also the [Gender Capacity Development section](#).)

Leveraging gender expertise from other institutions. Many Activities (85 percent) indicated they sourced gender expertise from other institutions to leverage existing capacities, tools, and approaches. Even in Activities that had full-time or part-time gender advisors, there was a shared understanding that collaboration with others was necessary and beneficial. CSISA, which is led by the International Maize and Wheat Improvement Center (CIMMYT), participates in GENNOVATE, “a community of practice within the Consortium of International Agricultural Research Centers (CGIAR) Platform for Gender Research.”⁷ Through this collaboration, CSISA has sourced short-term support and received feedback on field survey questions. The [Small-Scale Irrigation IL](#) engages with partners such as the International Food and Policy Research Institute (IFPRI) and International Water Management Institute that have extensive experience with the WEAI to help them adapt it for irrigation.

Drawing on peer researchers and postdocs. A few Activities were using peer researchers⁸ and postdocs as gender advisors. The [Peanut IL](#), for example, brought on a postdoctoral researcher as its gender advisor, which resulted in a greater feeling of peer exchange among biophysicists and supported more meaningful gender integration. Similarly, the [Horticulture IL](#), through its sub-award with Pennsylvania State University, engaged peer researchers to lead its gender integration and gender capacity development work. The lead on gender for Pennsylvania State University indicated that she saw a unique advantage in being peers.

... I think some of the other researchers listened to us as co-PIs on different types of projects. We understood what their challenges were because we were dealing with the same challenges, so I think that could be a strength. —Gender advisor, Pennsylvania State University

Centralized gender advisors play an essential role in standard setting and knowledge transfer. Although it is a more resource-intensive model, there were numerous perceived benefits of having a centralized gender advisor liaising with in-country or project-level gender focal points. For example, the [IPM IL](#) has a part-time gender advisor who supports local gender focal points on each research project. He sees value in being the central point of connection, from where he can help capture learning, standardize tools and processes, facilitate knowledge transfer and exchange among the community of gender focal points and researchers/PIs, and ensure technical quality. For example, he was able to apply knowledge and lessons learned from Bangladesh—around research that looked at subjective indicators of empowerment, which

⁷ <https://gennovate.org/about/>

⁸ Peer researchers are defined as gender experts who were also leading research of their own, generally as PIs, through a competitive sub-award process or as a part of the Activity or host institution research portfolio.

had been difficult to measure—in suggesting more appropriate methods (e.g., Most Significant Change) to capture changes in empowerment for work in Cambodia and Vietnam.

What I've learned ... is to be available, connected so that our focal person feels supported and that dialogue with the PIs, the gender focal point, and myself and [the director], that we have a constructive, healthy dialogue. –Gender advisor, IPM IL

Africa RISING has two full-time gender advisors who oversee the different programs (one for the Ethiopian Highlands program, one covering four countries in the East/Southern Africa and West Africa regions). These centralized positions allowed the gender advisors to take a core role in setting strategy (through gender action plans in the beginning, and now as a part of the SIAF), providing technical oversight and guidance to research teams, conducting gender-specific research, providing robust capacity development, and enforcing gender minimum standards along with the director.

B. CREATIVELY ADDRESSING BUDGETING CHALLENGES

Across Activities, many directors and gender advisors indicated that gender integration was under-resourced, relative to what they were trying to achieve and other competing priorities. In some cases, this led to cutting or scaling back gender integration. In other cases, Activities creatively addressed resource challenges through tailored approaches that included leveraging resources from other partners, addressing human resource shortages, aligning activities to achieve results in human and institutional capacity development (HICD) and gender integration, and pitching add-on funds to amplify gender integration work.

Leveraging resources from other partners. As a relatively smaller research Activity in total funding, the **Post-Harvest Loss IL** found ways to draw on work the **Sustainable Intensification IL** had done in Bangladesh through its Appropriate Scale Mechanization Consortium (ASMC). Through partnership and collaboration with Bangladesh Agricultural University (BAU), the Post-Harvest Loss IL applied the ASMC's work on gender-sensitive technology profiles of mechanization projects to post-harvest technologies (e.g., hermetic storage bags for rice and small-batch grain dryers). The Post-Harvest Loss IL also partnered with the Sustainable Intensification IL ASMC and leveraged resources to conduct joint training on increasing the awareness of gender roles in research activities in which staff and researchers on the Bangladesh team participated.

And so that was just a really natural fit where we could get something with a lot of impact without a huge amount of additional investment, because we already had some of those fixed costs in place. –Assistant director, Post-Harvest Loss IL

Addressing human resource shortages. The International Institute of Tropical Agriculture (IITA), which leads **Africa RISING** research in East/Southern Africa and West Africa, applied for a fellowship through a sub-institution of GIZ to resource a gender advisor at half the cost. This fellowship provides experts, especially gender experts, to the CGIARs for 1 to 6 years and provides their basic salary and social insurance, leaving IITA to pay for operational costs and housing. Originally a 2-year offer, the fellowship has been extended twice, and IITA is applying for a second gender advisor.

Aligning activities to achieve HICD and gender results. The Peanut IL funded a tailored version of the GREAT program—a 2- to 3-day training workshop where breeders and geneticists can gain skills, knowledge, and support systems to develop and implement gender-responsive projects—through the HICD portion of its budget. Because this included sending up to 100 local researchers and PIs to be trained, the Peanut IL could leverage resources earmarked for HICD and achieve results related to HICD and gender integration. For further explanation of the how the Peanut IL is leveraging the GREAT program for capacity-development efforts, see the [Gender Capacity Development section](#) and the case study in [Annex D](#).

Pitching add-on funds to amplify gender research. The Peanut IL is in the early stages of designing a small incentive fund that would accompany its capacity-development work under the GREAT program. The intent is to have a session in the GREAT training for researchers/PIs to pitch adjustments to enhance gender integration in research or capacity development, funded from the small incentive fund. This could include, for example, making the sample size for a research study statistically significant for both women and men.

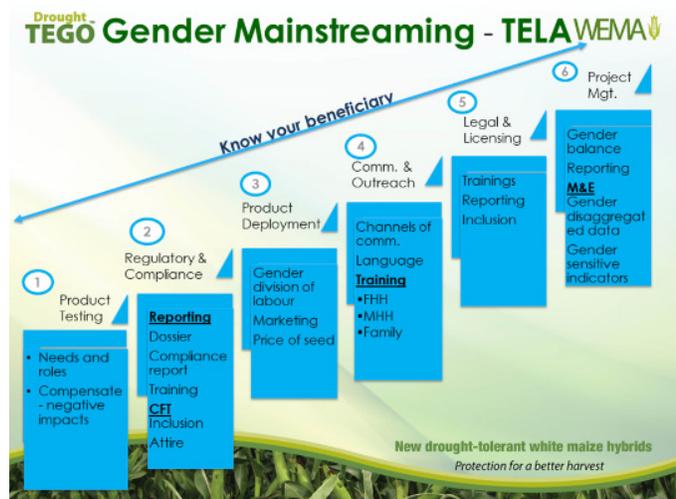
Because the first thing you do when you tell researchers that they need to do something more is they go, “But we don’t have any more money.” So, we want to take that out of the equation. We really want them to think about what it would take. –Director, Peanut IL

C. GENDER STRATEGY DEVELOPMENT AND APPLICATION

Although 85 percent of Activities reported having a research-specific or Activity-wide gender strategy, many of these varied widely in form, including many that were not formally documented. Promising approaches to developing and applying gender strategy included frameworks that articulated Activity-wide gender integration efforts and gender strategy that was operationalized through country- or project-level work plans.

Promising Activity-level frameworks for gender integration. At the start of the third phase of the WEMA/TELA project, the African Agricultural Technology Foundation created an organization-wide gender strategy as part of broader gender mainstreaming efforts. They used the strategy as the basis for a specific gender mainstreaming roadmap within WEMA/TELA. The roadmap consisted of “six steps for mainstreaming gender” ([Exhibit 5](#)) that spanned product testing, regulatory and compliance issues, product deployment, communications and outreach, legal issues and licensing, and project management.

Exhibit 5: Six steps for mainstreaming gender



The WEMA project manager explained:

... since we were now going to start a new phase of the project, which is the TELA maize project, we felt, well, let's start applying it [the gender strategy] so that we can collect all the lessons that will guide us in our product deployment later. –Project manager, WEMA

Although this was more of a drive from the institution, the TELA project identified tangible ways to integrate gender across the six stages. This included conducting a gender analysis, integrating gender sensitivities in confined field trials, applying insights from the analysis to the product deployment stage, marketing and communicating with women and men in preferred and appropriate ways, identifying female-owned seed companies, and tracking and reflecting on M&E data. They credited this as an instrumental part of enhancing productivity and adoption of their hybrid maize seed.

The [Small-Scale Irrigation IL](#) had a conceptual framework⁹ for gender developed through a participatory process early in the program. The framework details why and how gender fits into small-scale irrigation and lays out goals and objectives of the IL. Along with other critical and ongoing gender integration work, the framework was a foundational step for the IL, where staff, researchers, and partners could get on the same page about what gender meant specifically in irrigation and why it was a core part of their work and not an add-on.

[Our framework] was helpful because when people would come to us with questions about gender, we could just share that document with them and say, this is the perspective that we take. It also, I think, helped us to start out with that because then we understood where we were at and we were all, across the partners, then we were all on the same page. Then we put that on the website and we would use it at trainings and shared it at workshops and that type of thing. Other researchers outside our IL started to use and adapt the framework. –Director, Small-Scale Irrigation IL

Among a variety of planning techniques, [CSISA](#) used CIMMYT's Scaling Scan Tool¹⁰ in work planning meetings, which helped CSISA assess the scalability of different interventions—the “ingredients” required to enable self-propelled outscaling after the project withdraws support - including impacts they hoped to achieve, risks, or potential negative side effects. Teams, which included CSISA staff and researchers, and partners, brought to the planning meeting data from evaluations and past research on the interventions/technologies they promote and their scalability according to the criteria set forth in the Scaling Scan tool ([Exhibit 7](#)). This information was summarized in a series of bar charts and other formats so that when everyone arrived at the planning meeting, it was openly shared, discussed, and reflected on. Using the probes in the Scaling Scan tool, teams discussed gender and age equality, inclusiveness, power equity, and resilience, and incorporate these reflections in planning priorities for the next year.

⁹ https://ilssi.tamu.edu/media/1356/ilssi-approach-to-gender_summary-document_final_pdf.pdf

¹⁰ <https://www.cimmyt.org/content/uploads/2019/01/PPPLab-and-CIMMYT-The-Scaling-Scan-2019-02-full.pdf>

Exhibit 6: Select social responsibility questions to be asked as part of Scaling Scan Tool

GENDER AND AGE EQUALITY	INCLUSIVENESS	POWER EQUITY	RESILIENCE
Do women, men, young and elder people equally benefit from and have access to resources and opportunities?	Are those affected by the technology included in decisions about the scaling pathway and whether or not the intended impacts constitute success?	Who are the winners, and who are the losers, when the new innovation is adopted at a large scale?	What is the cost of failure, and who will bear it?

Source: *Scaling Scan Tool*, page 8 (<https://www.cimmyt.org/content/uploads/2019/01/PPPLab-and-CIMMYT-The-Scaling-Scan-2019-02-full.pdf>).

Operationalizing gender strategy through country/project-level work plans. Africa RISING’s programs in West Africa and East/Southern Africa have integrated gender in their planning processes starting with the development of a gender action plan,¹¹ which was a helpful first step in articulating their vision for gender and inclusion and laying out activities to address inequalities in research and capacity development. The action plan included gender-sensitive and gender-specific activities, outputs, outcomes, responsibilities, and means of verification through which progress could be tracked. When Africa RISING transitioned to the SIAF, the team decided that instead of writing separate gender action plans for each research project, the SIAF could provide a strategic entry point for integrating gender in research projects, including better gender-integrated work plans (see the Africa RISING case study in [Annex D](#) for a “how-to” on facilitating gender priority setting with research teams using the SIAF).

The SIAF has not only increased demand from researchers for gender support, but also fostered teamwork and collegiality among researchers and the gender team as a result of the process they engage in together.

I think that this framework has been very, very helpful, and it has been very helpful that this has become mandatory in a certain way ... a joint process of going through the domains, and that somehow helped as well to think of gender as one part to be integrated and opened a door... so this was like getting closer to each other through the framework –Gender advisor, Africa RISING

The **Post-Harvest Loss IL** was in the process of using learning from gender surveys and focus group discussions conducted under phase I as the basis for developing a program-wide gender strategy, which will be developed through a collaborative effort with U.S. and in-country partners. The strategy will integrate gender considerations across the IL’s portfolio, including research in agricultural economics, agricultural education/extension, technology testing, training delivery, and policy dialogue. One of the key findings built into their strategy is that men are also disempowered in many of the agricultural and livelihood decisions they make. In addition to addressing women’s unique barriers, the IL will focus on male and collective barriers. This program-wide gender strategy will flow into country work plans, and detail specific activities and metrics. For example, they have already identified opportunities for gender

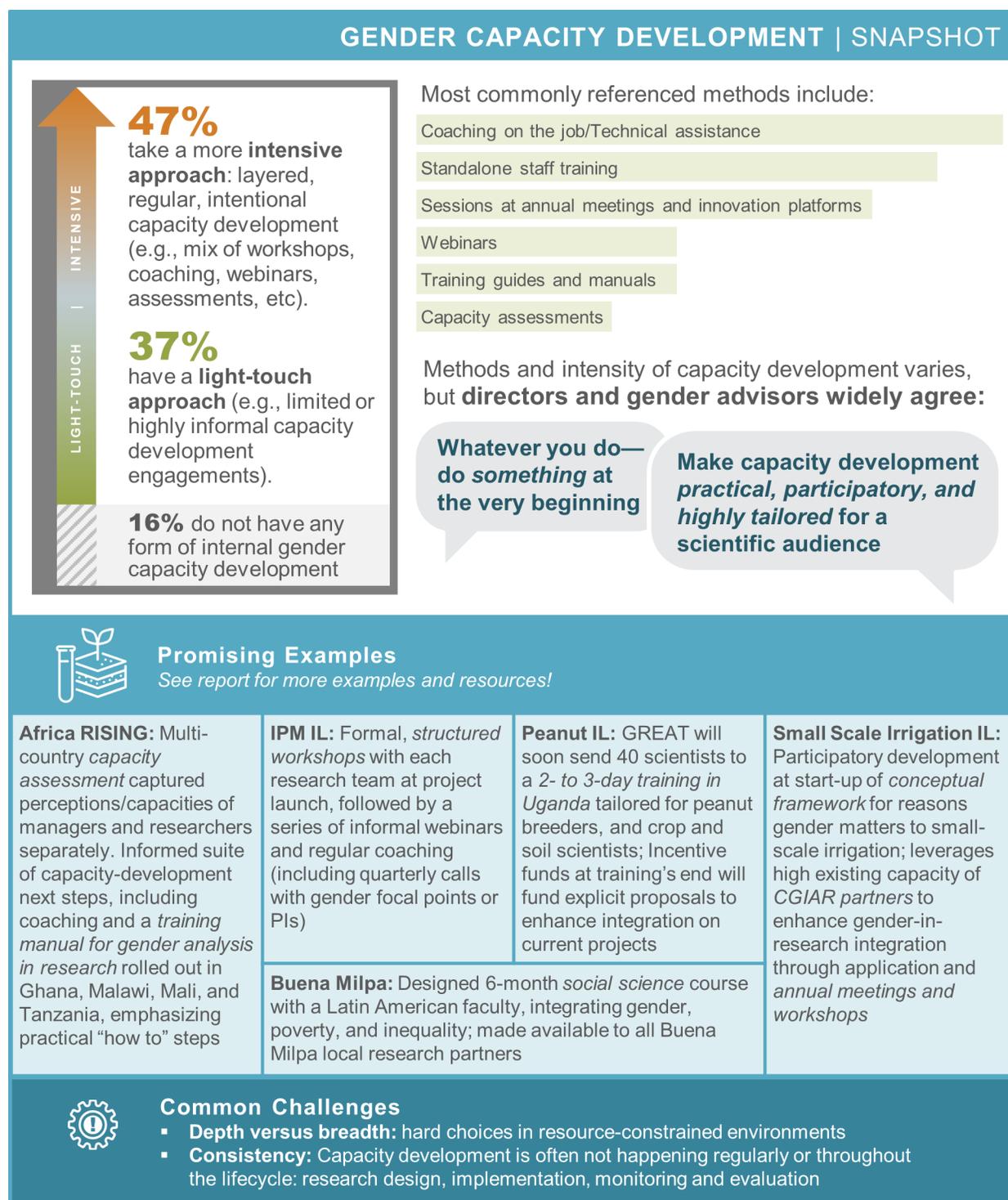
¹¹ For more information: https://cgspace.cgiar.org/bitstream/handle/10568/82853/AR-WESA-GenderPLan_2017.pdf

and youth integration in the Bangladesh country work plan, including researching and testing the BAU-STR dryer and hermetic storage bags with male and female technology users and non-users, service providers, farmer association members, and extension agents, and developing gender-based technology profiles. These profiles will include gender-based constraints and consequences, gender-based advantages and disadvantages of technology adoption and use, and solutions to address gender-based constraints.

GENDER CAPACITY DEVELOPMENT

CURRENT STATE OF PRACTICE

Exhibit 7: Gender capacity development – snapshot



LESSONS LEARNED/KEY TAKEAWAYS

A majority of directors and gender advisors endorsed capacity development as a necessary foundation for actual gender integration in research practice. This included layering mixed capacity-development methods to build a range of skills, from basic gender concepts to awareness of gender's relevance to the research sector, to survey design and research ethics. Activities reported a range of lessons learned, presented below, that highlight the link between building awareness and skills about how to apply gender to researchers' work and promoting the application of this knowledge at the key times.

1. **Addressing the social-biophysical science divide.** In a scientific community that primarily includes researchers who work in the biological and physical sciences, many Activities noted a bias against social science research overall, gender-related or not, that often worked against more robust gender integration, perceptions of the quality of gendered data, and resource allocation. A majority of directors and gender advisors identified crossing the initial awareness barrier as a foundational first step to meaningfully integrating gender in research practice—in other words, understanding why and in what specific ways gender was relevant to their core research objectives and their science.

[T]here's still a fairly steep learning curve. ... The first thing we need[ed] to do was raise the awareness, both of why it's important, but also how do you actually incorporate that and bring it into a research program. –Director, Peanut IL

Several gender advisors and directors spoke about how capacity-development experiences could be effective ways to break down some of these barriers. [Africa RISING's](#) gender advisor emphasized how collaboration during survey design and field-research became key experiential capacity-development opportunities, while [IPM IL's](#) gender advisor noted how gender-focused capacity-development workshops during the project design or launch phase

[built a] dialogue between our biophysical scientists, our plant pathologists, our entomologists, with our social scientists, so they can communicate effectively with each other, and see that they all have the same priorities...and where they intersect...

A smaller set of Activities, however, shared that within their teams, there was much openness and recognition that gender was relevant, and that the core issues were not the need for sensitization and awareness; it was the need to build skills and “Aha!” moments around how to integrate gender. The director of the [Small-Scale Irrigation IL](#) emphasized her experience that *showing* researchers, through data and experience over time, as opposed to *telling* them through up-front training, was the best route to convince those who might be gender blind. This IL also benefited from having a powerful network of CGIAR partners who were already widely regarded for strong gender-integration-in-research capacities.

2. **Dedicating time to applied learning on tools and experiential exercises.** This was repeatedly emphasized as critical for any gender integration capacity-development effort. Many of the resources and efforts profiled in the promising approaches below and catalogued in [Annex A](#) reflect this attention to experiential learning in their design.
3. **Coaching is an important, albeit less formal, form of capacity development.** Many Activities emphasized the value of interactive, ongoing coaching one-to-one, as the director of [CSISA](#) noted:

I have not found one off trainings to be something that is really, really effective in creating a change in attitude or activity ... what's more promising is building or emphasizing the need for this kind of thinking much more into the daily activities of staff and into the activities of work plan development ... you have to make it a regular part of daily capacity development, daily interactions with staff, and so on. This is best helped, or I've seen it best helped previously when we had staff whose role it was to actually do that. But in absence of that, what it requires is a willingness to consistently coach, gently agitate, gently and constructively criticize, and encourage staff to think a bit more out of the box on these issues.

4. **Whatever you do, do something at the very beginning.** Several Activities advised that, at a minimum, some foundational capacity development exercise around gender in agricultural research at the start of the award was key, so that everyone is aware of the requirements or strategy and can keep it in mind as they plan.

Once scientists (even women scientists) had names for gender concepts that they fully understood, then it became a part of discussions and allowed scientists to better engage with me. By raising awareness, it encouraged more dialogue and engagement on these topics.” –Gender advisor, Food Processing and Post-Harvest Handling IL

5. **Recruiting women as researchers.** This was mentioned as a challenge. Some Activities observed that having women in the room provided more organic surfacing of gender issues in research, whereas others noted this did not necessarily mean gender was coming out more strongly. It is important not to assume that individuals have gender integration knowledge because of their sex (i.e., adding female researchers to a team that previously lacked gender balance will positively add to the diversity of perspectives, but is not a substitute for gender expertise to support the team’s gender integration processes and knowledge).
6. **Flowing capacity to “hyper-local” partners.** This study focused on capacity development of core staff and partners/sub-awardees. That said, several Activities flagged a challenge of figuring out how to ensure consistency through the “chain” of partners, especially for Activities that work with highly localized partners that are geographically removed from the core project team.

PROMISING APPROACHES

As the gender capacity development snapshot ([Exhibit 8](#)) illustrates, nearly half of the Activities studied (47 percent) have adopted an intensive capacity-development approach, layering mixed methods delivered through repeated engagements. The other half take an informal “light-touch” approach or do not have capacity-development efforts at all.

There are **wide variations in the breadth and depth of capacity development**, as well as in the methods Activities found useful. These methods include standalone training, webinars, resources and guidelines, on-the-job coaching and feedback, workshops and facilitated discussions at annual meetings or project launches, academic courses, capacity assessments, and even deliberate use of evidence from research studies to intentionally shift gender perceptions of staff, partners, or market actors. [Annex A](#) lists multiple capacity-development tools and exercises shared with the research team during this study. It includes facilitator and training guides, capacity assessment surveys, discrete workshop exercises, annotated bibliographies, guidelines for staff in capturing gender-sensitive stories, and more; many of these are available online.

The study also found that among those Activities following a more intensive approach, capacity-building efforts tended to target a range of skills, focusing at first on “gender basics” (e.g., sex and gender) and gender within agriculture, and then layering in capacity development related to awareness raising on how gender influences outcomes in the specific research areas or targeted commodities and gender-integration in research (e.g., survey design, relevant data collection tools, research methods, ethics). Some Activities introduced concepts related to empowerment domains and gender-transformative approaches, gender strategy, and introductions to USAID’s Gender Policy.

This section highlights a range of capacity-development efforts. For example, the [Livestock Systems IL](#) conducted a three-part webinar series on gender and nutrition (combined), covering data collection, design, and final reporting. The IL produced a *Training Manual for Researchers: Integrating Gender and Nutrition into Livestock Research* and an annotated bibliography of gender- and livestock-related research and resources. See [Annex A](#) for links to these resources. Working with a very limited level of effort, this approach was both strategic and cost-effective. The gender advisor also provided coaching to select programs (e.g., Cambodia, Ethiopia, and Rwanda) and workshops at project start-up or innovation platform meetings. In the box below, the gender advisor shares a simple, yet particularly effective exercise she used early in her workshops to expand people’s mindsets around gender.

“A Day in the” Life Role Play: Workshop Exercise

“I divide people up into small family groups, and have the men act as women and the women act as men. And I have them act out a typical day on a smallholder farm in that country, where the men then actually get to experience what the women do, and then the women get to experience what the men do.

“Afterwards we debrief the exercise and talk about not only the actual activities, the number of hours, the types of activities, etc., but also: How does it feel to be empowered for the first time if you’re a female being a male? Or how does it feel as a male being a female to be disempowered? What does it feel like to actually have that experience?

“For some folks, that is the most profound experience they take away from the workshop. It’s really very much about adult learning principles ... thinking about how do we address what that [participant] feels like as a person about this issue, as opposed to just how can they potentially apply it in their research ... That really has a lot of impact ... probably a lot more impact than just presenting content.”

–Gender advisor, Livestock Systems IL

The gender advisor tried to do pre- and post-surveys on capacities developed during these workshops, plus a follow-up 6 months later on what was applied. In a recent workshop series, *Integrating Gender and Nutrition into the Project Planning Cycle of the Meat and Dairy Value Chains*, conducted for partner universities, Livestock Systems IL sub-awardees, and organizations involved in food safety in Ethiopia, the most significant positive changes in capacities from the pre-/post-tests were seen in the following areas:

- Describe how to use a gender tool to collect data in meat and dairy value chains (51 percent improvement in capacity)
- Identify where/how gender and food safety issues intersect in meat and dairy value chains (53 percent improvement in capacity)

- Develop/Facilitate gender and nutrition-oriented training with a food safety focus in the field (42 percent improvement in capacity)

Over a series of annual meetings, each of which had a short workshop on incorporating gender, the [Horticulture IL](#) (through its gender partner, Pennsylvania State University) incrementally layered capacity development in different gender topics. It started with the basics of why gender matters, then tools for incorporating gender in research and outreach, and most recently, in Spring 2019, collecting lessons learned and takeaways from PIs (see [Monitoring, Evaluation, and Learning](#) for more on this topic, and [Annex A](#) for links to resources). A webinar covered topics such as integrating gender into research, sensitizing staff, developing an actionable gender strategy, and designing activities that meet women's needs. The IL's gender-specific WAgN project in Honduras (also led by Pennsylvania State University) incorporated topics such as time use, division of labor, self-esteem, and leadership into a 4-month horticulture production-based farmer field school training.

The [Soybean IL's](#) Gender Impacts Research team developed the GRADA tool, which the [Fish IL](#) was adapting for rollout. GRADA is designed to (1) evaluate how research scientists, technicians, and other implementing partners measured the gender impacts of the IL's activities and training; and (2) identify gaps and determine entry points to improve the Soybean IL's efforts to effectively implement gender-responsive development into activities and training. (See box for sample survey questions and results.)

Spotlight on the GRADA Survey: Questions and Results

The GRADA survey includes questions such as:

In the research site(s) where my Soybean IL activities are conducted, factors that negatively affect agricultural productivity include ...

- Choices include ratio of men to women extension agents, technicians are skewed; men and women farmers have different access to agriculture inputs; men farmers tend to have higher crop yields than women farmers; women farmers lack equal input into agriculture decisions

My Soybean IL staff routinely ...

- Choices include consider women farmers' unique time constraints when planning Soybean IL training and outreach (e.g., childcare); consider gender norms that can constraint women farmers' participation when planning Soybean IL training and outreach (e.g., norms against women's speaking up in public, even to extension agents); seek to recruit and train female extension agents, technicians to work directly with women farmers; train male extension agents, technicians in how to work around barriers women farmers face
- And more, related to current challenges and successes experienced by staff, demand for skills-building; current measurement approaches/indicators, and engagement with research institutions

Results at a Glance, among Soybean IL staff and partners (Wave 1 – 2016 and Wave II – 2018)

- Nearly 60 percent of Wave II participants (compared to 46 percent of Wave I) said lack of equitable access to land negatively affected women farmers' productivity in their research sites.
- 52 percent of Wave II participants, compared to 32 percent of Wave I participants, reported encouraging extension services to reach more women farmers as a gender integration success they'd had.
- This enhanced awareness directly reflects Soybean IL capacity-development efforts, including webinars on gender and land and presentations on extension.

Like the Soybean IL and Fish IL, [Africa RISING](#) conducted a gender capacity assessment (see [Annex A](#) for the link) early on with its staff to “direct attention to the importance of gender capacities for the success of the projects, to provide an outline for a capacity development plan, and to enable the management to prioritize areas for increased efforts and to set a baseline against which continuous capacity development can be measured.” As profiled in the case study in [Annex D](#), Africa RISING places a significant focus on capacity development using a range of formal methods (e.g., capacity assessment and workshops) and informal methods (e.g., one-on-one coaching and learning-through-research studies). The capacity assessment informed the focus of targeted training courses for Africa RISING staff directly, and then for partners. The Activity has trained almost half of its partners.

To counter gender bias, one strategy the Africa RISING gender advisor found effective was to “be conscious of who the initial mouthpiece was”; in other words, getting non-gender specialists to be the initial mouthpiece in training on the reasons gender mattered. She used “converted” peers and bio-scientists—some staff, others highly respected consultants. During the pre- and post-training tests, for example, participants in Tanzania reported perceived ability to apply participatory gender analysis tools with social scientists more than doubled. In Mali, perceived ability to employ survey research principles

such as gender-sensitive sampling and gender-analytical questions increased by 35–37 percent. Across Ghana, Malawi, Mali, and Tanzania, nearly every participant reported identifying entry points for including gender analysis in research with social scientists. In a follow-up evaluation 1 year after the training series, participants emphasized that their understanding of gender concepts and terminology had improved and they had shared it with colleagues. Many had also tried using participatory tools or established a more gender-sensitive manner of conducting surveys. Training participants expressed that regular gender meetings (follow-up sessions) should be organized so they could share field experiences and discuss or resolve problems. They also requested further support to integrate gender analysis results into programming and research protocols.

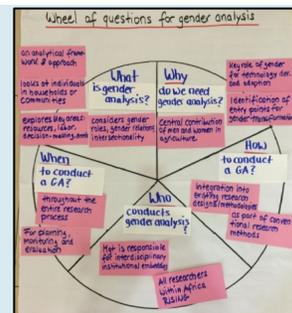
Learnings from those series of training sessions informed development of a more comprehensive training guide ([Exhibit 9](#)) that captures facilitation notes and detailed exercises and frameworks.

Exhibit 8: Gender Analysis in Farming Systems and Action Research: A Training Manual

Published in March 2019, *Gender Analysis in Farming Systems and Action Research: A Training Manual** has been used for Africa RISING gender training in Ghana, Malawi, Mali, and Tanzania.

The manual includes exercises for:

- **Linkage diagrams:** a participatory exercise to identify gender-relevant issues in the context of an agriculture technology
- **“Wheel of questions”** exercise to draw out the what, why, when, how, and who of gender analysis
- **Sample surveys** to practice integrating gender into a questionnaire (e.g., to inform selection of a forage chopper)
- Skill building and templates in **activity profiles, daily activity clocks**, and **seasonal calendars** as useful analysis tools, especially around labor and relationship to technology



This page from the manual is titled 'Africa RISING Gender Training: Activity Profiles, Seasonal Calendars and Daily Activity Clocks'. It contains:

- An introductory paragraph about labor's role in agricultural labor processes and the importance of understanding gender and labor relationships.
- Key points: 'to design gender sensitive and labor-saving technologies' and 'to pass their skills on to other women for both men and women farmers'.
- A table titled 'Activity Profiles (Examples)' with columns for 'Activity', 'Frequency', 'Duration', 'Season', and 'Gender'. It lists activities like 'Planting', 'Weeding', 'Harvesting', etc.
- A photograph showing a group of people sitting on the ground in a field, engaged in a discussion.
- Logos for FEED THE FUTURE, USAID, ILRI, and EAT.

*Access the manual at <https://cgspace.cgiar.org/handle/10568/100149>

The IPM IL takes a mixed-methods approach to capacity development, supported through a gender advisor located in the management entity who works with a network of in-country/project-specific gender focal points. They started with formal, structured workshops, working with researchers and teams at the beginning of the project to do some basic sensitization activities and then guide an initial rapid gender assessment required in the Request for Proposals. Then, the gender advisor conducted a series of informal webinars and other training courses with gender focal points or PIs, along with coaching.

In our trainings [we] encouraged our research partners to track what strategies, approaches they use to engage women and men in the trainings ... several PIs started to not just document what strategies they use, but what they might do different[ly] or what worked well or what didn't work well for them after reflecting at the end of that training. For me, [this has also] been a success – putting that learning into action for future outreach activities. –Gender advisor, IPM IL

As highlighted in the gender capacity development snapshot ([Exhibit 8](#)) and the case study in [Annex D](#), the [Peanut IL](#) is in the final planning stages of designing a tailored 2- to 3-day training course for researchers across its portfolio. The Peanut IL is relatively unique in that one of its four core areas of research inquiry is gender (and youth); this course represents an intentional effort to build capacity among researchers working in the other three areas of inquiry and avoid siloing gender integration only within the set of projects that fall under the fourth area (gender and youth). The GREAT program is a joint initiative between Cornell University in the United States and Makerere University in Uganda. The Peanut IL is working with GREAT to create a 2- to 3-day version of what is typically a multi-week program, specifically tailoring the curriculum for peanut research, and to start cycling groups of 20 to 30 researchers through the course beginning in early 2020.

In addition to GREAT, the Peanut IL plans to bring the PIs for its gender-specific research projects together in November/December 2019 for a joint meeting to enhance synergies across the projects, potentially develop a gender strategy, and perhaps plan a gender research symposium within the IL for 2020, when more primary data are available as the projects roll out.

I think one of GREAT's strengths is that they have designed these training specifically for plant breeders, crop and soil scientists. Obviously, it's based in social theory, but it's very grounded in and very much applied to the particular kinds of contexts in which these scientists are working. –Gender advisor, Peanut IL

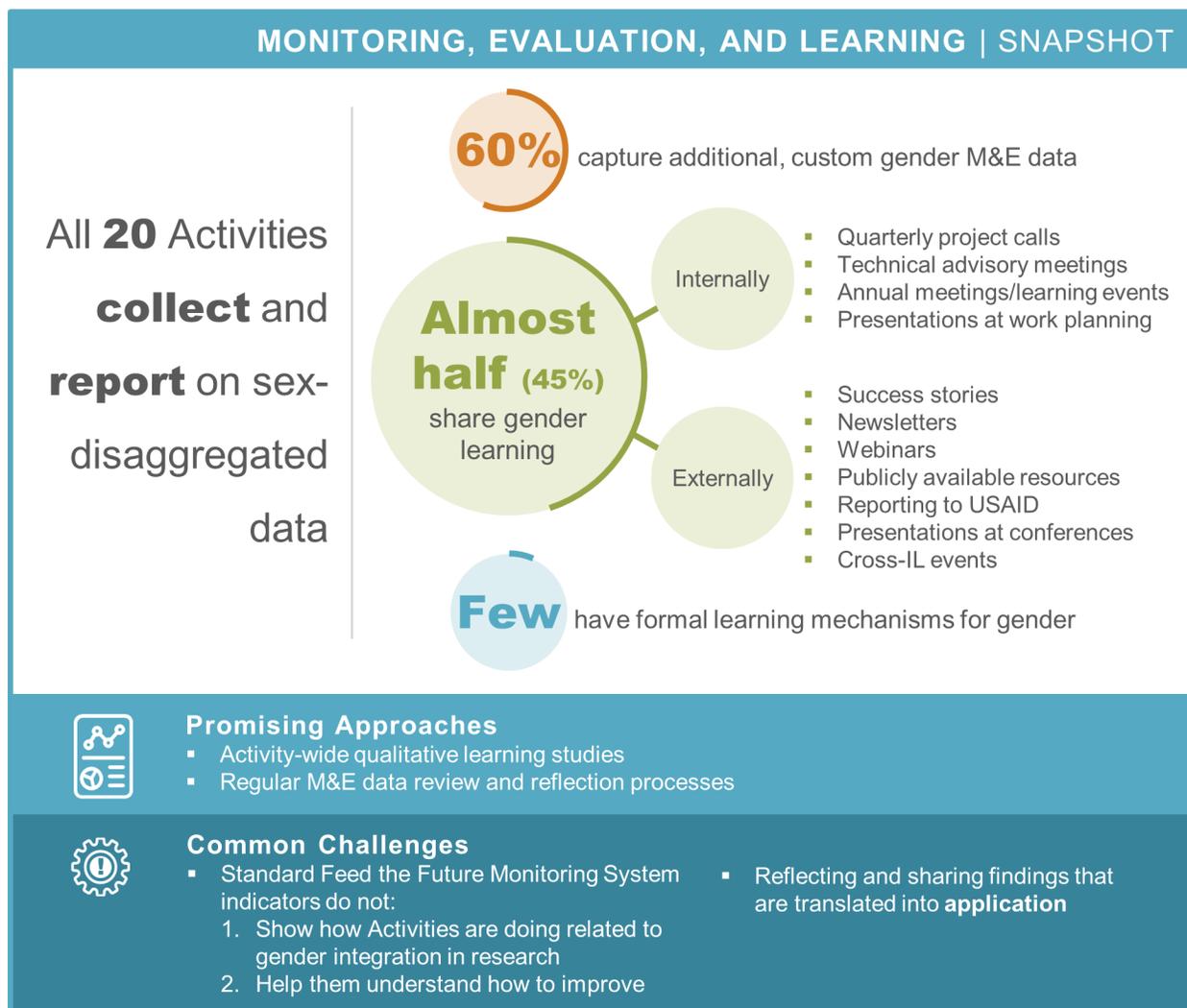
[Buena Milpa](#) focused its capacity-development efforts on local partners, which included a mix of gender workshops and individualized technical assistance to support strategy development and implementation, and develop gender analysis and monitoring tools. Buena Milpa also worked with a Latin America faculty to develop a 6-month course integrating gender, poverty, and inequality. This was made available to all their local partners.

Although the [Sorghum and Millet IL](#) has a lighter-touch approach to capacity development, in Ethiopia, the IL structured a gender study as a hands-on opportunity for capacity development among social scientists and biophysical scientists. The *woreda*-based gender study looked at the role of gender in sorghum production and use. Mixed-gender, interdisciplinary teams worked together to collect data, and gathered at a post-data-collection workshop to report results and share observations. This format proved to be an important capacity-development exercise because hard scientists learned the role and importance of social science in identifying and developing new technologies to address production and utilization issues, while social scientists gained knowledge in the technical aspects of sorghum production. All teams reported that the exercise had solidified the necessity of successful gender integration, because they had seen, firsthand, the impact gender had on production and utilization issues.

MONITORING, EVALUATION, AND LEARNING

CURRENT STATE OF PRACTICE

Exhibit 9: Monitoring, evaluation, and learning – snapshot



LESSONS LEARNED/KEY TAKEAWAYS

The snapshot above ([Exhibit 10](#)) illustrates not only that Activities were collecting and reporting on required sex-disaggregated data, but also that a majority were initiating efforts to capture additional gender-sensitive or gender-specific data to better understand gender dimensions and results in their research and practice. Nearly half of the Activities studied shared gender learning, but few reported formalized learning mechanisms or processes for reflecting on gender data and applying insights. Other key takeaways related to gender integration in Monitoring, Evaluation and Learning include the following:

- Standard indicators and reporting formats did not convey the full impact of the work or learning around gender.** Collecting sex-disaggregated data has been an important achievement for Activities to further progress in gender integration, but better metrics and

increased data collection in areas that disproportionately affect women or girls (and men and boys where they are marginalized) are needed. This includes going beyond the standard Feed the Future Monitoring System indicators, which Activities reported were not conducive to capturing the gender results of their work. Current reporting formats, including PieStar,¹² were not able to systematically collect gender results or information, which made it difficult to capture and aggregate learning across projects or Activity-wide. This can lead to Activities' under-reporting of gender outcomes/learning or investing extra time and resources in capturing results and learning, rather than this being an integral part of their MEL systems and processes.

From a Feed the Future indicator point of view, I don't really think that ... the important work that had the most impact in terms of gender ... was very well captured by indicators. –Director, Small-Scale Irrigation IL

2. **Balancing demands between getting numbers and understanding what is behind them.** Many Activities collected additional gender data through custom indicators or M&E studies, and there was a recognition that quantitative methods alone could not help Activities fully understand gender dynamics. When paired with qualitative methods, Activities could understand more fully how their research affected women and men, and the underlying dynamics of that.

What's really, really important from a monitoring and evaluation and learning process is ... taking stock of the issues around the interventions that you're working on, you're meeting with farmers, you're probing through focus groups on questions, you're trying to understand what the actual relevance of those numbers are and what they actually mean. So, I think that that's a key part that's often lost ... because there's such a heavy requirement with respect to generating numbers and indicators and impact that sometimes that's like the pursuit of the holy grail ... but also probe and query around them and understand what they mean. –Director, CSISA

3. **Collecting and analyzing gender M&E data is happening, but there is a gap in reflecting and applying insights.** As [Exhibit 10](#) illustrates, although more than half of Activities were collecting and analyzing gender M&E data, many faced difficulties in reflecting on that information through formal and informal learning processes, including sharing learning and applying the findings. Examples of collecting gender-sensitive and gender-specific M&E data were far more common than examples of applying insights from that data into research and capacity-development efforts, strategy and planning processes, and operational structures.
4. **Timing and sharing information were the two crucial things that stood out for Activities in terms of their relative importance to facilitating learning and applying insights to research and practice.** For data to be relevant and acted on, it needed to be delivered in a format and time frame that would enable decision makers to use it. A few Activities noted the tension between moving activities forward and having the right set of information to inform evidence-based design and implementation. Of the 45 percent of Activities that reported sharing learning, it was a critical part of helping them progress in their gender integration efforts,

¹² <https://www.piestar.com/usaidftf>

taking note of what was working and what was not, and where they needed to expand gender integration in capacity-development and research efforts to better achieve results.

5. **What matters gets measured.** In some cases, Activities felt that a lack of gender indicator guidance and reporting requirements insinuated that gender integration was a lesser priority than some other work that had specific indicators and reporting requirements tied to it. Given all the other results Activities were expected to achieve, gender integration was a common area to de-emphasize.

PROMISING APPROACHES

A. COLLECTING CUSTOM M&E DATA ON GENDER

More than half of the Activities studied (60 percent) collect additional gender-sensitive and gender-specific M&E data, including developing custom indicators and implementing special gender MEL studies.

[Exhibit 11](#) provides a set of custom indicators, M&E data, and methods used to capture data that Activities reported collecting to better understand gender in research and practice. Several examples below describe how Activities have used custom indicators or conducted specialized gender learning studies to better understand, measure, and learn from progress toward gender integration.

Exhibit 10: Custom, internal gender M&E data being collected

GENERAL OUTCOMES AND IMPACTS	CAPACITY-DEVELOPMENT RESULTS	SPECIFIC INDICATORS	MIXED METHODS USED TO CAPTURE GENDER M&E DATA
<ul style="list-style-type: none"> Gender impacts of technology, including unintended and negative impacts General harvesting of intended and unintended gender outcomes and lessons learned Attitudinal data looking at gender preferences Prioritized gender learning questions (some of which tie into Feed the Future learning agenda) 	<ul style="list-style-type: none"> Internal gender capacity-development results, including staff perceptions about relevance of gender to their research Number of staff, faculty, and partners trained in gender equity Pre-/post-assessments of gender outreach and capacity development Percent of female researchers who attend capacity-development workshops (target tied to national-level gender balance in scientific field) Effective strategies for engaging women and men in training and outreach activities 	<ul style="list-style-type: none"> Number of female entrepreneurs targeted for scaling up technology SIAF indicators Adapted WEAI indicators 	<ul style="list-style-type: none"> Focus group discussions and key informant interviews Surveys, including the A-WEAI Network analysis Most Significant Change Outcome Harvesting (adapted) Pre/post assessments Objective, Reflective, Interpretive, Decisional (ORID) method

The [Small-Scale Irrigation IL](#) and [Africa RISING](#) both used custom gender indicators as M&E tools. The Small-Scale Irrigation IL developed a custom internal indicator to begin to collect and analyze how gender-balanced their research training programs were. To set country-specific targets, the IL used national-level benchmark data on the gender balance in the field. These data informed targets helped the

IL know how it was achieving measurable progress in improving women researchers' participation in its capacity-development efforts. As a monitoring tool, Africa RISING required each research project to select two indicators from each of the five domains of the SIAF, including the social domain that involves gender. Most of the projects chose gender equity indicators focused on access to information and capacity to experiment. These indicators were monitored over the course of the year as part of Africa RISING's broader focus on the scale and sustainability of technology adoption. See the case study in [Annex D](#) for more information on Africa RISING's use of the SIAF for planning and M&E.

Several Activities reported conducting specialized gender learning studies to better understand gender dimensions and results of research and practice. For example, [CSISA](#) led a targeted outcome study with IFPRI in Bangladesh, looking at the hidden effects of harvesting technologies on women's access to and use of technology, as well as their household drudgery. Four important lessons learned from this study included questioning the meaning of "ownership" of technology, considering joint ownership and training on technologies where husbands and wives prefer to work together, tapping into women's networks to boost technology adoption, and understanding not only men and women's ability to use agricultural machinery on their farms but also their access to the business opportunity presented by machinery (e.g. business providers).¹³

B. PROMOTING ACTIVITY-WIDE AND CROSS-ACTIVITY LEARNING

Almost half of the studied Activities (45 percent) shared out gender learning internally or externally, but few reported having formal mechanisms or methods to facilitate learning processes for gender, either within or across Activities. One of a few exceptions was the [Livestock Systems IL](#), which recently piloted the ORID method with researchers and partners in Cambodia to reflect on gender learning. The method takes 2 to 3 hours and has participants break into small groups and discuss the following:

- **What** – happened? **Objective Question:** What happened in your project to address gender inequities or other gender issues in the livestock value chain?
- **Gut** – How do you feel about what happened? **Reflective Question:** What words describe your feelings about the gender results in your project?
- **So what** – difference does this make? **Interpretive Question:** What came through to you as very important when integrating gender into your project and the livestock value chain?
- **Now what** – do we do? **Decisional Question:** What will you do differently in your interactions and work with men and women farmers in livestock value chains in the future?

After the "Gut" and "Now what" stages, participants post flip charts with their reflections on the wall and one person shares results with the rest, using a gallery walk. The Livestock Systems IL had plans to repeat the ORID method in additional countries in late 2019 and early 2020.

A standout example of facilitating cross-Activity gender learning was the *Gender Across the Innovation Labs* workshop, held in Washington, D.C., in June 2019 by the [Horticulture IL's](#) WAgN project. Twenty-six faculty and researchers from 12 universities/institutions, 8 ILs, and 10 projects came together to discuss

¹³ For more information: https://csisa.org/wp-content/uploads/sites/2/2018/03/CGAN-CSISA-MECH-GENDER-RN_final.pdf

common experiences in conducting gender-focused research, highlighting challenges, methods, and priorities in order to learn from each other. Details of the workshop were captured in a summary report provided to the attendees and USAID.

C. CONNECTING THE DOTS: FROM DATA COLLECTION AND ANALYSIS TO LEARNING AND APPLICATION

A commonly observed challenge was that although many Activities collected and analyzed gender M&E data, few applied insights and learning to research and practice. Where Activities were able to “connect the dots” between data collection/analysis and learning/application, this was usually accompanied by a culture of sharing learning and insights (internally and externally) and formal and informal learning mechanisms that were connected to planning and (re)design efforts.

For example, the [Horticulture IL](#) promoted internal sharing and learning on gender lessons learned, impacts, and project-specific results at annual meetings. Initially, annual meetings were primarily a mechanism through which layered capacity development was delivered to researchers and provided them exposure to gender-responsive research conducted by the WAgN project in Honduras. Over time, the annual meetings became a forum where research teams could discuss gender issues encountered in their projects, talk through how to apply gender insights in their work, and solicit input from colleagues on how to address shared challenges. The Pennsylvania State University gender advisor credited this shift to the fact that discussions around gender elevated as more researchers were exposed to it year after year and were better equipped to apply broader insights through the capacity-development efforts. Discussions at annual meetings included identifying previously overlooked gender issues when introducing new technologies (e.g., time burdens and children’s safety), debunking assumptions that women do not always control income earned through improved productivity, and recognizing the returns on investment of promoting women’s inclusion. Since the same researchers attend each annual meeting, the Pennsylvania State University team could informally assess team progress in applying gender insights. For example, after focusing on gender and outreach during an annual meeting, a researcher the next year shared how they had adjusted their efforts to improve women’s participation levels in cooperatives.

Another example of supporting researchers to apply insights from learning into research and practice is the [IPM IL](#). Because the IL has a gender advisor that sits within the Management Entity, whose role is to support research projects and a network of project-based gender focal points, they were able to integrate gender into existing management and communication processes. This included incorporating gender capacity development and peer exchange at annual meetings and holding quarterly project update calls with PIs and gender focal points to assess progress, surface challenges and learning, identify areas for further support. The IPM IL gender advisor also participated in technical advisory committee meetings, which is another opportunity for reflection and capturing of lessons learned.

These processes brought in gender more intentionally, and the gender advisor used them as an opportunity to harvest informal gender insights, support teams in conducting more rigorous gender assessments, and encourage the application of insights in research and practice. For example, the gender advisor used the sex-disaggregated results of the short-term training indicator to engage with some of his research projects on quarterly calls to talk about whom they were inviting, what was working, what

was not working, what they could do differently, and so on. In discussions with an IPM research project in Vietnam with low levels of female participation in technical training, the research team was advised to conduct gender-focused research to understand why that was the case, and ultimately pivoted to develop a capacity-development program that worked with women’s unions to more fully engage women in their outreach. These informal conversations have helped spark dialogue and learning so much that the gender advisor is promoting the use of a checklist of tactics and considerations to encourage women’s participation in research and outreach activities.

LOOKING FORWARD

Significant progress toward gender integration is occurring and creating a foundation for further advancement. To fully strengthen wide-scale, impactful gender integration in agricultural research, Activities will need to not only better apply research findings in their own programs, but also broaden and deepen connections across their various research efforts so gender integration does not remain siloed within a few standout examples. Solid foundations must exist within institutions to support these efforts, including adequate human resources, budgets, strategies, and robust capacity-development initiatives that are critical to achieving a shared commitment to gender’s relevance to research and breaking down biophysical/social science divides.

RECOMMENDATIONS

1. **Cross-Activity collaboration mechanism.** In response to the strong demand Activities expressed, USAID would be wise to invest in a cross-Activity collaboration mechanism that could support ongoing peer learning and exchange within the resource-constrained gender-in-research environment. This would allow Activities to adopt and adapt tools, share data, and, as one director put it, “make different mistakes, not the same ones.” Priorities for cross-Activity collaboration that surfaced from interviews and the Feed the Future IL Director’s Meeting in September 2019 are in the box above. Moreover, cross-Activity collaboration needs to be relevant to a multitude of stakeholders, not just gender advisors. Specific requests for relevant cross-Activity collaboration priorities included the following:

Cross-Activity Collaboration Priorities

- Gender Community of Practice
- Gender-focused research symposium
- Online portal of peer resources/tools
- Shared access to data sets
- Opportunities for co-authoring (e.g., USAID call for gender papers)
- Webinars, e-consultations (e.g., Agrilinks)

- a. For directors specifically, there was a desire for *best practices in management*, including how to structure their Activities and resources to achieve results or problem-solving on common challenges.
- b. Upstream researchers expressed a desire to *connect with Activities “like us.”* There was a strong impression among upstream researchers that what works for gender integration in downstream research might not be the same thing that works for upstream research.
- c. Acknowledging the valuable tools and insights they could access from larger and more well-resourced Activities, smaller and less-resourced Activities also expressed a desire to

connect with Activities similar in size to share lessons learned and “*what works*” with a smaller overall budget.

- d. While not specific to gender advisors, all gender advisors emphatically mentioned greater collaboration around *sharing tools and approaches* as a core priority in any cross-Activity collaboration mechanism.
2. **Investment in learning and application processes.** Many Activities struggled with applying gendered data and insights to research and practice, largely because most Activities had weak (or no) systems in place to manage iterative learning processes that fed back into research programming. Where these learning cycles did exist, they were highly beneficial in improving research practice and aiding decision makers on how and where to invest resources for maximum benefits. While learning processes primarily centered around M&E (e.g., using custom metrics and methods to better capture and understand results), they were most successful when connected with planning (e.g., conceptual frameworks or strategies for gender integration), adaptive management (e.g., pause-and-reflect sessions that feed into real-time decision making), and broader communication and knowledge management efforts. These learning and application processes require dedicated time, resources, and structures to thrive, which necessitates an investment on behalf of Activity leadership.
3. **Ongoing capacity development.** The shared challenges of the biophysical/social science divide and researchers not seeing gender as relevant to their research surfaced in conversations more frequently than any other challenge. Many believed capacity development was a foundational element to addressing this challenge, resulting in most Activities (84 percent) conducting some type of gender capacity development. However, these efforts were not going far enough to equip researchers with the necessary skills and capacities to fully implement more gender-responsive research. Progression from light-touch to higher-intensity integration needs to occur to see substantial improvements in both attitudes and practices around gender-responsive research. Existing resources, tools, and approaches made available through improved collaboration could facilitate cost-effective ways of achieving this.
4. **Desire for more gender-transformative practices in research,** including male engagement approaches. Although there were some examples of this occurring, including during community sensitization and mobilization before conducting research, many gender advisors mentioned this specifically as something they would like to learn more about and bring into their Activities. Many gender advisors also saw it as being a current missing piece of the discussion around gender integration in agricultural research.
5. **USAID-driven gender standards.** Although many Activities made their own decisions about resourcing, measuring, and integrating gender in their research practice, there was a lack of consistency and quality across those efforts. Furthermore, despite a willingness to integrate gender, many directors often faced competing priorities and limited resources, making the decision on how and where to invest difficult. Several directors expressed a strong desire for USAID-driven gender standards and guidance to help clarify priorities and expectations and allow them to make easy decisions when it comes to gender. A healthy balance of USAID’s providing direction and setting standards, and Activities’ owning gender integration processes that are right-sized to their context and enable them to achieve results is warranted.

ANNEX A: LIST OF RESOURCES

Many Activities expressed a desire for greater awareness of and access to the various tools and resources individual Activities used to integrate gender into their programming. Although a more comprehensive effort to do this is beyond the scope of this study, the research team has compiled this summary of key resources shared or identified in the course of this research. The tables below organize the resources (survey tools, discussion prompts, guides, and more) into four core areas, reflecting the four core categories of findings in the report:

- Resources for analysis (Exhibit 12), drawn from findings in the [Gender Integration in Research Practice section](#)
- Resources for strategy (Exhibit 13), drawn from findings in the [Resourcing and Operationalizing Gender section](#)
- Resources for capacity development ([Exhibit 14](#)) drawn from findings in the [Gender Capacity Development section](#)
- Resources for MEL ([Exhibit 15](#)): Most of these resources are referenced in the body of the full report (see the [Monitoring, Evaluation, and Learning section](#)), including additional detail on insights and outcomes from their use

Where possible, direct links to the resource are provided. The associated Activity is identified to encourage others to reach out directly for additional information and explore opportunities to proactively cross-pollinate resources and share data.

Exhibit 11: Resources for analysis

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
Sex-disaggregated consumer preference survey on beans	Survey explicitly considers how men and women have different constraints and opportunities within beans. Conducted as part of the breeding design and selection process.	Climate-Resilient Beans
Mixed- and single-gender focus group discussion guide	Focus group discussion guide used to pilot and refine mass media agriculture advisory messages or training messages before launching in Bangladesh to maximize the appeal to the target audience (male, female, or mixed audiences).	CSISA
Gender-sensitive consumer demand and user preference surveys – agricultural machinery	Survey tools employed by CSISA and data shared with the private sector to build the business case for agricultural service providers and extension agents in Nepal to better target women as a key and growing client base.	CSISA
Surveys on gender dimensions related to ownership and hiring services for multi-crop reaper harvesters	Small-scale qualitative survey interviewed husband-and-wife machine service providers, men and women who hire these machines for their farms, women farmers in non-mechanized farming households, and CSISA staff and community leaders. Surveys with mixed groups provided insights into why female participation remains low in both business ownership for multi-crop reaper services	CSISA

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
	<p>and hiring of these services, and programmatic responses. Results informed the strategy for rolling out the multi-crop reaper-harvester to maximize benefits for women.</p> <ul style="list-style-type: none"> Findings: https://csisa.org/wp-content/uploads/sites/2/2018/03/CGAN-CSISA-MECH-GENDER-RN_final.pdf. Contact brief authors for survey tools. 	
Adapted WEAI for irrigation	<p>Irrigation-specific questions related to the WEAI domains developed and used as part of gender analysis. Informs the IL's gender-responsive approach to research design and implementation.</p> <ul style="list-style-type: none"> Summary brief on specific tools relevant for small-scale irrigation and questions in the household survey that relate to gender: https://ilssi.tamu.edu/media/1356/ilssi-approach-to-gender_summary-document_final_pdf.pdf 	Small-Scale Irrigation IL
Participatory rural appraisal survey for sorghum	<p>Survey tool for gender roles and trait preferences in sorghum production, processing, and use. Used to inform varietal selection.</p> <ul style="list-style-type: none"> Tool available at: https://www.k-state.edu/smil/whatwedo/gender/Sample%20PRA%20survey%20tools.pdf 	Sorghum and Millet IL
Adapted WEAI for soybean	<p>Includes four additional modules targeted at soybeans, which the IL used during two waves: (1) as a diagnostic on access to versus control over land and the relationship to soybean fertilizers/hoped-for-productivity gains; and (2) to capture impact from soybean success kits.</p> <ul style="list-style-type: none"> Fact sheet on the adaptation process: http://soybeaninnovationlab.illinois.edu/sites/soybeaninnovationlab.illinois.edu/files/WEAI%20Fact%20Sheet%20.pdf Adapted survey tool (English, Ghana): http://soybeaninnovationlab.illinois.edu/files/WEAI%2B%20English.pdf Adapted survey tool (Portuguese, Mozambique): http://soybeaninnovationlab.illinois.edu/files/WEAI%2B%20Portuguese.pdf 	Soybean IL
Focus group discussion guide on gender norms and land tenure in soybean	<p>Survey conducted during two waves to explore trends in data to understand how norms shaped access to and control over land for rural Ghanaian women, and the relationship to soybean productivity. Contact the Soybean IL for the survey tool.</p>	Soybean IL
Survey on factors that drive adoption of drought-tolerant maize	<p>See report for results; contact WEMA/TELA for survey tools.</p> <ul style="list-style-type: none"> Report: https://www.aatf-africa.org/wp-content/uploads/2019/08/George-Marechera-et-al-July-2019.pdf 	WEMA/TELA

Exhibit 12: Resources for planning and project design

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
Scaling Scan	<p>CIMMYT tool, similar to the planning features of the SIAF, that guides teams through an internal assessment of the scalability of different interventions according to scaling ambition, system check, and responsibility check. Gender is integrated as a cross-cutting theme and appears most prominently in the responsibility check, as teams identify impacts they hope to achieve through their scaling ambition and associated risks, or potential negative side effects associated with those impacts.</p> <ul style="list-style-type: none"> In late 2019/early 2020, CSISA is exploring expanding the gender dimensions of this tool; follow up for progress. https://www.cimmyt.org/news/scaling-scan-a-simple-tool-for-big-impact/ 	CSISA
Guidance on gender integration in project proposals/assessment prompts	<p>Brief guidance that accompanies RFPs and includes prompts for a rapid gender assessment applicants are expected to respond to as part of their application.</p> <ul style="list-style-type: none"> See Appendix 1 at: https://horticulture.ucdavis.edu/sites/g/files/dgvnsk1816/files/funding_opportunity_docs/2014_rfp_postharvest.pdf 	Horticulture IL
Nine tips for incorporating gender into research projects	<ul style="list-style-type: none"> Blog post summarizing the integration tips: https://horticulture.ucdavis.edu/blog/9-tips-incorporating-gender-research-project 	Horticulture IL
Presentation on incorporating gender into research and project design	<p>Focuses on the barriers to and importance of incorporating gender into agricultural research and how to do so using qualitative, quantitative, and mixed methods. Includes topics such as sensitivity to local gender norms; asking the right questions; understanding how a proposed intervention could affect men and women differently; reasons gender matters, gender equity as a basic human right, and available data on women's roles in agriculture; and barriers to women's participation in agriculture. Includes workshop discussion questions to facilitate dialogue after the presentation.</p> <ul style="list-style-type: none"> Presentation: https://horticulture.ucdavis.edu/information/incorporating-gender-research-and-project-design 	Horticulture IL
Gender Guidelines for Proposal Development	<p>To support quality of responses, provides insights on issues to consider by research area, as well as potential indicators applicants might want to incorporate.</p> <ul style="list-style-type: none"> Guidance: https://www.k-state.edu/smil/docs/gender/SMIL%20Gender%20Guidelines%20for%20Proposal%20Development.pdf 	Sorghum and Millet IL

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
Sustainable Intensification Assessment Framework (SIAF)	<p>A framework (primarily a MEL tool, but can also be leveraged to enhance project design and planning; see Africa RISING case study in Annex D) that supports assessing indicators associated with five domains critical to sustainability: productivity, economic, environment, human conditions, and social domain. Supports teams to investigate tradeoffs and synergies of their innovations, and integrates biophysical and social science concerns and methods.</p> <ul style="list-style-type: none"> Resources include a guide to the SIAF, a how-to methods manual for each SIAF metric, a radar chart generator to aid data visualization across multiple indicators, and a sustainable intensification toolkit to support assessment and adaptive management: https://www.k-state.edu/siil/resources/framework/index.html 	Sustainable Intensification IL and Africa RISING
Six Steps to Operationalizing Gender	<p>Larger framework for operationalizing gender across research objectives and steps for development and deployment of drought-tolerant maize in Ethiopia. Focuses on product testing, regulatory and compliance issues, product deployment, communications and outreach, legal and licensing issues, and project management. See Exhibit 5: Six steps for mainstreaming gender.</p>	WEMA/TELA

Exhibit 13: Resources for capacity development

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
Gender Analysis in Farming Systems and Action Research Training Manual	Detailed facilitators' guide to lead agricultural research teams through a participatory workshop that builds skills in integrating gender analysis in research, while identifying core areas where gender is critical to achieving objectives and potential research priorities. Leverages the five domains in the SIAF as a process for analyzing and considering issues. Includes exercises for linkage diagrams that explore gender and agricultural technologies; sample research surveys and exercises for integrating gender in existing surveys; a "wheel of questions" exercise to draw out what, why, when, how, and who; and skills-building and templates in Activity Profiles; and daily activity clocks and seasonal calendars as useful analysis tools, especially around labor and its relationship to gender and technology. See the Africa RISING case study in Annex D for more information. <ul style="list-style-type: none"> • Training manual: https://cgspace.cgiar.org/handle/10568/100149 	Africa RISING
Guidelines for capturing gender-sensitive stories	Guidance on gender-aware selection of sources, stories, and visual material; the elimination of stereotypes; and the use of fair language.	Africa RISING
Gender capacity assessment	A multi-country capacity assessment that looked at the presence of policies in each country and surveyed managers and staff on their perceptions of their own capacity and capacity of their project staff. It informed a suite of next steps to enhance gender integration in Africa RISING. <ul style="list-style-type: none"> • Key findings, design methods, focus group discussion and key informant interview guides, and the survey: https://cgspace.cgiar.org/handle/10568/72524 	Africa RISING
Annotated bibliography of gender learning resources	Includes basic concepts for understanding gender in agriculture: standards for the collection of sex-disaggregated data, tools for gender analysis and participatory fieldwork, and approaches for increasing women's participation in Results for Development activities. Includes specific themes, such as gender in mapping, livestock, and climate change research. <ul style="list-style-type: none"> • Bibliography: https://cgspace.cgiar.org/bitstream/handle/10568/77488/AR_gender_oct2016.pdf 	Africa RISING
Gender-Sensitive Maize Post-Harvest Training Manual for Field Promoters (Spanish)	Spanish-language training manual for field-level promoters engaged in post-harvest best practices for maize, including to reduce growth of aflatoxin. Drawn by a local Honduran illustrator, the manual consciously reflects gender-sensitive images, including accurate depictions of women engaged in post-harvest activities. <ul style="list-style-type: none"> • Available under training materials at: https://www.k-state.edu/phl/resources/resources.html 	Buena Milpa and Post-Harvest Loss IL
Gender Responsive Agricultural Development Assessment (GRADA)	A survey tool to (1) evaluate how research scientists, technicians, and other implementing partners measure gender impacts of IL activities and training; and (2) identify gaps and determine entry points to improve the Soybean IL's efforts to effectively implement gender-responsive development	Fish IL and Soybean IL

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
	in activities and training. Domains of the GRADA tool include gender concepts, gender-responsive research, and gender integration in Soybean IL activities.	
Video snapshot on integrating gender into farmer field schools	A 90-second video on farmer field schools held in Honduras that includes discussions of gender roles and responsibilities, decision making in the household, and leadership. <ul style="list-style-type: none"> • Video: https://horticulture.ucdavis.edu/information/talking-about-gender-farmer-field-schools 	Horticulture IL
Three-part webinar series on gender and nutrition combined	Sessions cover data collection, design, and final reporting in the context of livestock systems research. <ul style="list-style-type: none"> • Webinar series: http://livestocklab.ifas.ufl.edu/events/webinars-on-gender--nutrition 	Livestock Systems IL
Livestock research and gender annotated bibliography	Compilation of relevant articles on gender and livestock value chains, including tools for gender integration, gender norms and intra-household dynamics, and a variety of gender-sensitive research studies specific to the various impact pathways in the Livestock Systems IL (e.g., disease management, feed, production and marketing, animal-source food protein, food safety). <ul style="list-style-type: none"> • Bibliography: http://livestocklab.ifas.ufl.edu/media/livestocklabifasufledu/pdf-/Gender_Annotated_Bibliography_12.14.2018.pdf 	Livestock Systems IL
Training Manual for Researchers: Integrating Gender and Nutrition into Livestock Research	Facilitators' guide for a 2-day training; makes extensive use of participatory exercises and includes a sample training agenda, a workshop evaluation survey template, PowerPoint slides, and guidance for developing case studies. Developed to improve the integration of gender and nutrition in livestock research, the manual focuses on the stages of the research project lifecycle and what can be done to integrate gender and nutrition at each stage, even if they were not integrated in previous stages. <ul style="list-style-type: none"> • Training manual: http://livestocklab.ifas.ufl.edu/media/livestocklabifasufledu/pdf-/Training-Manual-Integrating-Gender-and-Nutrition-in-Livestock-Research.pdf 	Livestock Systems IL
"A Day in the Life" Role Play	Brief workshop exercise to encourage mixed-gender groups to explore gendered division of labor and power dynamics in a typical rural farming household. Used to show participants, rather than tell them, about how gender shapes household-level decisions and behaviors that could influence agricultural research priorities. See the box titled "A Day in the Life Role Play: Workshop Exercise" in the Gender Capacity Development section for a full description on facilitation.	Livestock Systems IL
Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) Program	A collaboration between Cornell University in the United States and Makerere University in Uganda, GREAT is an intensive program, targeted at agricultural researchers. Aiming to "build and engage communities of researchers equipped with the skills, knowledge, and support systems to develop and implement gender-responsive projects, GREAT advances gender-responsiveness as the norm and	Peanut IL

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
	<p><i>standard for agricultural research.</i>” See the Peanut IL Case Study in Annex D for more information on how GREAT is tailoring a 2–3-day program for peanut breeders and scientists.</p> <ul style="list-style-type: none"> • More information, including course offerings and access to research data: www.greatagriculture.org 	

Exhibit I 4: Resources for MEL

RESOURCE NAME	DESCRIPTION	ASSOCIATED ACTIVITY
Objective, Reflective, Interpretive, Decisional (ORID) Method	Facilitation method used to tease out gender-based learning and outcomes from research staff. It includes Objective, Reflective, Interpretive, and Decisional questions. See “B. Promoting Activity-Wide and Cross-Activity Learning” in the Monitoring, Evaluation, and Learning section of this report.	Livestock Systems IL
Integrating Gender into Small-Scale Irrigation Learning Note	Synthesizes lessons learned about promoting small-scale irrigation uptake based on the IL’s gender research to date. It is organized around three phases of technology adoption: (1) becoming aware of the technology; (2) trying the technology; and (3) continued adoption. <ul style="list-style-type: none"> • Brief: https://www.agrilinks.org/sites/default/files/resources/pn_2017_ilssi_gender_r2.pdf 	Small-Scale Irrigation IL
Sustainable Intensification Assessment Framework (SIAF)	A framework (primarily a MEL tool, but can also be leveraged to enhance project design and planning; see Africa RISING case study in Annex D) that supports assessing indicators associated with five domains critical to sustainability: productivity, economic, environment, human conditions, and social domain. Supports teams to investigate tradeoffs and synergies of their innovations, and integrates biophysical and social science concerns and methods. <ul style="list-style-type: none"> • Resources include a guide to the SIAF, a how-to methods manual for each SIAF metric, a radar chart generator to aid data visualization across multiple indicators, and a sustainable intensification toolkit to support assessment and adaptive management: https://www.k-state.edu/siil/resources/framework/index.html 	Sustainable Intensification IL and Africa RISING

ANNEX B: HIGHLIGHTS OF GENDER INTEGRATION PROJECT EVALUATION GUIDANCE

Below are excerpts (in italics) from guidance documents and instructions provided to applicants to support the quality of gender integration in proposals. Several Activities that provided this guidance reported that it often took several rounds of revisions to get a high-quality result, so it may be necessary to incorporate stages, guidance, explanation, or even capacity development to assist applicants in understanding gender integration requirements and guidelines.

Integrated Pest Management IL: Gender Requirements Stated in the Solicitation

The application must present a gender analysis that discusses important gender issues relevant to appropriate IPM [integrated pest management] research, development, and extension activities. The application must explain how gender considerations and equity issues will be integrated into the design, implementation, management, knowledge sharing, capacity development, and M&E of the overall project activities; requires that 10 percent of the evaluation criteria is weighted for gender, and that research should plan and conduct economic and gender impact evaluations of the IPM technologies and packages.

Horticulture IL: Gender Requirements Included in the Evaluation Criteria

Gender nutrition and enabling environment: How well is the gender of stakeholders (end-users, trainees, and other participants) taken into account? To what extent has gender sensitivity been integrated into activities? Has significant consideration been given to gender issues in project development? Have potential negative effects on nutrition been considered? Are there measures in effect throughout the life of the project to respond to unintended negative consequences related to gender or nutritional status?

These requirements tie into broader capacity-development efforts and a focus on MEL. In addition to including these guiding questions, applicants must propose indicators to report on and disclose whether technologies replace or negatively affect women.

For full requirements, see:

https://horticulture.ucdavis.edu/sites/g/files/dgvnsk1816/files/funding_opportunity_docs/2014_rfp_post_harvest.pdf

Sorghum and Millet IL: Gender Guidelines for Proposal Submission

Gender requirements for proposal submission—and guidance for how to integrate gender in a proposal—are provided in a handout to prospective applicants. The guidelines include language stating expectations for how applicants should incorporate gender in their proposals:

Each proposal submitted to the [Sorghum and Millet IL] is expected to describe the gender issues the research team anticipates encountering, how they will be addressed and how projects will promote equitable participation by women. All projects have gender implications, but some will require greater attention than others [sic] those that are closer to the delivery of new technologies, knowledge, production systems or products.

To support high-quality responses, the guidance also provides insights on gender-specific issues to consider, organized by research area, and potential indicators. For example, “genetic enhancement” issues include:

- *Cultural norms regarding the type of work men and women do during the cropping season. This is often defined according to the physical demand of the task (e.g., men perform land-clearing and plowing; women perform weeding and other technical activities). Some traits plant breeders developed might be gender neutral (e.g. those that enhance host-plant’s resistance to stresses), while nutritional, processing, and organoleptic traits may be more important to women. Certain traits may have either positive or negative effects. For example, varieties with greater resistance to weeds may reduce the time required by women during weeding, which could be positive if those resources are captured in other household activities or negative if weeding is the woman’s wage-earning activity.*
- *Access to and control over resources generally mediated through men (either husbands or fathers)*
- *Limited access to water among women*
- *Time constraints for profitable activities due to responsibilities to the household and children*
- *Roles in seed selection, seed keeping, and seed selling/distribution*
- *Varieties and volumes of sorghum/millet produced and for what purpose (home consumption, brewing, local sale, commercial sale, etc.)*

These requirements tie into broader capacity development efforts and a focus on MEL. In addition to including these guiding questions, applicants must propose indicators to report on and disclose whether technologies replace or negatively affect women.

For full guidance: <https://www.k-state.edu/smil/docs/gender/SMIL%20Gender%20Guidelines%20for%20Proposal%20Development.pdf>

Small-Scale Irrigation IL: Gender Included in the Problem Statement and Evaluation Criteria

In a recent Annual Program Statement (APS) for private partnerships to scale small-scale irrigation, the problem statement included the following language:

... lack of attention to women's and other marginalized group's needs, preferences and uses in the design and marketing of small-scale irrigation technologies.

Evaluation criteria for the APS included the following requirement:

Proposals should demonstrate how the irrigated production business model(s) will meet business goals and objectives while engaging and supporting smallholder farmers and marginalized populations, especially women and youth. The proposals should indicate who are smallholder farmers, women and youth and the number of those target groups the business model(s) intends to reach and how the model can increase their incomes and expand their market access. Especially, the proposal should demonstrate how the business model(s) will incorporate opportunities and address constraints for women along SSI [small-scale irrigation] scaling pathways. Challenges to scaling related to gender that prevent women from entering SSI production should be considered and proposed solutions contextualized.

For the complete APS: <https://rfx.piestar.com/opportunities/texas-a-m-university/rfp/93>

ANNEX C: LIST OF KEY INFORMANTS

NAME	TITLE	ACTIVITY
Jesse Poland	Director	Applied Wheat Genomics IL
Haley Ahlers	Project Manager	Applied Wheat Genomics IL
Jill Findeis	Social Impact Program Manager	Climate-Resilient Beans IL
Mark Lawrence	Director	Fish IL
Kathleen Ragsdale	Gender Advisor	Fish IL; Soybean IL
Jacob Ricker-Gilbert	Director	Food Processing and Post-Harvest Handling IL
Cheryl O'Brien	Gender Advisor	Food Processing and Post-Harvest Handling IL; Post-Harvest Loss IL
Huaijun Zhou	Director	Genomics to Improve Poultry IL
Terra Kelly	Deputy Director	Genomics to Improve Poultry IL
Elizabeth Mitchem	Director	Horticulture IL
Janelle Larson	Gender Advisor	Horticulture IL (sub-award to Pennsylvania State University)
Rangaswamy "Muni" Muniappan	Director	IPM IL
Daniel Sumner	Gender Advisor	IPM IL
Barry Pittendrigh	Director	Legume Systems IL
Cynthia Dixon	Deputy Director	Legume Systems IL
Andrea Allen	Gender Advisor	Legume Systems IL
Adegbola "Gbola" Adesogan	Director	Livestock Systems IL
Kathleen Colverson	Gender Advisor	Livestock Systems IL
Shibani Ghosh	Associate Director	Nutrition IL
David Hoisington	Director	Peanut IL
Jessica Marter-Kenyon	Gender Advisor	Peanut IL
Dena Bunnell	Assistant Director	Post-Harvest Loss IL
Nicole Lefore	Director	Small-Scale Irrigation IL
Tim Dalton	Director	Sorghum and Millet IL
Kira Everhart-Valentin	Program Coordinator	Sorghum and Millet IL
Gina Ricomendez	Gender Consultant/Research Fellow	Soybean IL

NAME	TITLE	ACTIVITY
Vara Prasad	Program Director	Sustainable Intensification IL
Jan Middendorf	Associate Director	Sustainable Intensification IL
Irmgard Hoeschle-Zeledon	Project Manager (IITA)	Africa RISING: West, East and Southern Africa regions
Gundula Fischer	Gender Advisor (IITA)	Africa RISING: West, East and Southern Africa regions
Peter Thorne	Project Manager (ILRI)	Africa RISING: Ethiopian Highlands
Annet Mulema	Gender Advisor (ILRI)	Africa RISING: Ethiopian Highlands
Tim Krupnik	Director	CSISA
Luis Ramirez	In-Country Coordinator	Buena Milpa
Carolina Camacho	Gender Advisor	Buena Milpa
Sylvester Oikeh	Project Director	WEMA/TELA
Grace Muinga	Gender Advisor	WEMA/TELA
Caleb Obunyali	Program Officer	WEMA/TELA

ANNEX D: CASE STUDIES

On the following pages, case studies are presented for four Activities:

- Facing the Upstream Research Challenge: Gender Integration in the Peanut Innovation Lab
- The Process of Gender Integration: Practical Tools and Tactics from Africa Rising
- Follow the Leader: Gender-Specific Research Project Provides the How-To in Horticulture
- Harvesting Learning and Applying Insights: Evolving Models from the Integrated Pest Management Innovation Lab

CASE STUDY

FACING THE UPSTREAM RESEARCH CHALLENGE: Gender Integration in the Peanut Innovation Lab

INTRODUCTION

Upstream agricultural research Activities face particular challenges in integrating gender. The Feed the Future Innovation Lab for Peanut (Peanut IL) is tackling this challenge head on as it launches a new phase of programming using a two-pronged approach that:

- Elevates gender (and youth) to a core area of research inquiry, providing dedicated resources and management attention toward multi-year, gender-specific research projects
- Prioritizes a dedicated capacity-development program for researchers engaged in the other three areas of inquiry to ensure gender is integrated across the Peanut IL and does not become siloed only within “the gender projects.”

Both these initiatives were in initial stages in 2019. The gender-specific research projects were in start-up mode and initiating baselines in the second half of the year, and the broader capacity-development training was scheduled to launch in early 2020. The Peanut IL offered valuable early-stage insights into a potential model of gender integration that provides opportunities (and resources) to both dive deeply into gender research and go broadly across an activity’s multifaceted objectives.

THE CHALLENGE

Women are heavily engaged in peanut production around the world, with peanuts often referred to as “a women’s crop.” Yet, understanding how gender dynamics between men and women shape issues (e.g., exposure to pathogens, preferences about cooking time or taste, or time available for productivity-enhancing technologies) is beyond the established worldviews, training, and scientific partner networks of many agricultural researchers. To strengthen and deepen this understanding, the Peanut IL has gender

Activity Highlights

Name: Feed the Future Innovation Lab for Peanut

Lead Institution: University of Georgia

Core Countries: Ghana, Malawi, Senegal, and Uganda

Value of Award: \$14 million

Period of Performance: 2018–2023

Scope: Apply U.S. science to improve peanut production and use, raise nutrition awareness, and increase food safety in developing countries



and youth as dedicated research areas. Further the Peanut IL is working with researchers to integrate gender in three other core areas of inquiry—improved peanut varieties, increased value-added gains along the peanut value chain, and increased understanding of peanuts in nutrition and health.

A shift in several established processes was required for the Peanut IL to operationalize this approach, which included:

- Hiring a senior gender advisor on the External Advisory Panel and a postdoctoral researcher to serve as a nearly full-time gender advisor in the Management Entity and provide regular, specialized expertise
- Broadening the set of research partners who were encouraged to apply for gender-specific research projects
- Addressing how to avoid researchers' perceptions in the other three areas of inquiry (varietal development, value-added gains, and nutrition) that gender was "taken care of" by the fourth area, and was therefore not a priority or not relevant to their work.

The Peanut IL has awarded five research projects under the gender and youth area of inquiry:

- In Ghana, a 3.5 year project, budgeted at \$437,000, explores time poverty among female peanut producers. This is particularly important, given that peanut production is very labor intensive. It includes testing the efficacy of several time-saving technologies and methods, and a capacity-development aspect around gender-sensitive research with a local research institution.
- Also in Ghana, a 4 year project, budgeted at \$600,000, involves a randomized control trial to assess the gendered outcomes of aggregator models, often used for linkages to higher-value markets.
- In Senegal, a 2-year research project, budgeted at \$395,000, studies the influence of intrahousehold structure, gendered power dynamics, and shocks (weather events, pregnancy/childbirth, and illness) on women's participation in peanut production. The project employs demographic surveillance methods and is developing a wearable-technology-based approach to measure time use and labor allocation.
- Also in Senegal, a 3-year project, budgeted at \$350,000, uses primary and secondary household survey data to explore the impact of climatic shocks and land tenure insecurity on the out-migration of young, rural men and women from Senegal's Peanut Basin.
- In Uganda, a 3-year project, budgeted at \$300,000, uses photovoice—a participatory, qualitative visual research methodology—to investigate the needs and aspirations of female and male rural youth (ages 20–29) and assess strategies for empowering them to engage in the peanut value chain.

To support integration across the rest of its portfolio, the Peanut IL is working with the **Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT) program**, a collaboration between Cornell University in the United States and Makerere University in Uganda, which provides intensive capacity development and training targeted at breeders and geneticists. Starting in 2020, the Peanut IL will send up to 100 of its graduate students and principal investigators (PIs) to a tailored 2- to 3-day workshop. This intensive capacity development will be complemented by other

opportunities for cross-activity integration, including through discussions at annual meetings and a small-scale incentive fund that supports slight adjustments in ongoing research to enhance the quality of gender-specific or gender-sensitive research.

As these projects ramp up, annual meetings of the PIs will be held to support cross-pollination and learning. These meetings are considering internal Peanut IL research symposia to present and exchange research findings.

The Peanut IL gender advisor is working with the GREAT program to tailor their workshops for peanut breeders and crop and soil scientists. The first cohort of approximately 40 individuals will attend the training in March 2020, with a goal of having one to two more cohorts over the next few years. The first wave will focus on graduate students; future waves will include PIs and other scientists.

Session topics are still being finalized, but will include the following:

- Gender theory and implications for the peanut value chain in Africa
- What it takes to integrate gender in peanut research: a gender-responsive agricultural research cycle
- Gender dynamics in peanut seed systems
- Gender dynamics in the workplace
- Men and masculinities

At the end of the workshop, participants will identify specific action items to improve gender integration in their own projects. The Peanut IL intends to offer a small incentive fund to support the action steps whose realization requires funding.

GREAT's goal is as follows:

“... by building and engaging communities of researchers equipped with the skills, knowledge, and support systems to develop and implement gender-responsive projects, GREAT advances gender-responsiveness as the norm and standard for agricultural research.”

A particularly valuable feature of the program is its extensive use of African trainers, which enhances its ability to dive deeply into unique sociocultural constructs that are critical to understanding gender norms. More information is available at <http://www.greatagriculture.org>.

THE LEARNING

The Peanut IL is in the early stages of implementation, so the future will bring additional lessons learned. The gender-specific research projects in Ghana and Senegal are rolling out baseline surveys. The GREAT program's training workshops for the Peanut IL's broader set of researchers will commence in early 2020. The Peanut IL director shared this perspective on the impact of shifting gender into a core area of research:

“It’s allowed us to push a stronger gender agenda. One of the problems with mainstreaming gender is that it can get lost when it’s viewed as a cross-cutting theme. Elevating it to a research area equivalent to breeding and genomics has enabled us to channel a quarter of our budget or more to gender-specific research. Having those PIs coming to our annual meetings, has helped to elevate the importance of gender across the rest of the portfolio.”

However, he cautions that this requires intentionality so gender is not lost in the other three areas of inquiry. This is addressed by investing in the capacity development described above.

The director and the gender advisor both highlighted the value of taking a “soft” approach to raising awareness among breeders and lab scientists and looking for ways to create “Aha!” moments about the relevance of gender through coaching, conversations, and peer learning. For example, comments from a peer scientist—one who had happened to attend a more intensive version of a GREAT training workshop through a separate program—led a plant pathologist to realize how gender affects the different environments women and men go into, and therefore influences their knowledge of alternative hosts for diseases affecting peanuts. This concrete example opened his mind. It demonstrated a broader lesson for the Peanut IL—that awareness is a key threshold that can be a particular challenge for upstream researchers to overcome, but is still essential to gender integration in practice.

CONTACT

For more information on the Peanut IL’s gender work, contact Director Dave Hoisington at davehois@uga.edu or Jessica Marter-Kenyon at jsmk@uga.edu.

This case study looks at one of four Activities profiled as part of a more comprehensive synthesis on the extent and nature of gender integration across 20 agricultural research Activities funded through USAID’s Bureau for Food Security, Research Division. The study was conducted by the Feed the Future Advancing Women’s Empowerment program and is available at <https://www.agrilinks.org/gender-research>.

CASE STUDY

THE PROCESS OF GENDER INTEGRATION: Practical Tools from Africa RISING

INTRODUCTION

Africa RISING has prioritized gender integration in its research on sustainable intensification in agricultural systems across Sub-Saharan Africa. The Activity's efforts center around three core areas:

- Capacity development to build core skills and learning by doing
- Gender integration in core Activity-wide planning and evaluation processes through the Sustainable Intensification Assessment Framework (SIAF)
- Practical experience embedding gender analysis into agricultural research

The Activity is conducting gender-sensitive research in multiple countries and making ongoing adaptations to planning processes to continually strengthen research quality and program outcomes. For simplicity, this case focuses on the experience, resources, and actions of the two IITA-led regional projects.

THE CHALLENGE

Africa RISING, like many agricultural research Activities, was facing one of the biggest hurdles in gender integration—overcoming hidden biases against gender research. This bias was compounded by natural capacity gaps inherent in the education and daily responsibilities of biophysical and economic scientists, who had often not been trained to conduct gender-sensitive research, and whose field tended to focus on the household as a single unit, which overlooks intrahousehold differences and power dynamics that are significantly influenced by gender norms. Two design features of Africa RISING's research make it nearly impossible to ignore the influence of gender: (1) the focus on household-level farming systems over an individual crop; and (2) the downstream nature of its activities, which include ample farm-based research trials, as opposed to working in laboratories thousands of miles away.

Nevertheless, Africa RISING did not start integrating gender until the end of its first phase. Management had begun to observe, informally, the implications of technology uptake *without* a gender lens. After

Activity Highlights

Name: Africa Research In Sustainable Intensification for the Next Generation (Africa RISING)

Lead Institutions: IITA (East, West, Southern Africa) and International Livestock Research Institute (ILRI; Ethiopian Highlands), with International Food Policy Research Institute (IFPRI) for monitoring and evaluation

Core Countries: Ethiopia, Ghana, Malawi, Mali, Tanzania, and Zambia

Period of Performance: 2016–2021 (current Phase 2); 2011–2016 (Phase 1)

Scope: To transform agricultural systems through sustainable intensification projects in three regions: West Africa (cereal-livestock-based farming systems); Ethiopian Highlands (crop-livestock systems); East and Southern Africa (maize-legume-livestock farming)

bringing on a gender advisor, late in Phase I, they realized several capacity gaps that were challenging staff's ability to effectively mainstream gender into research.

When Africa RISING adopted the [SIAF](#) in 2018, staff (regardless of scientific background or function) faced a shared challenge in learning about this standardized framework and wrestled not only with what the SIAF was, but also with the process for teams to walk through it and arrive at strengthened analytics and better-designed and monitored projects. This shared challenge provided a critical window of opportunity for the gender advisor, who was able to leverage both the framework and the process of using it to figure out how to integrate gender into the research design, implementation, and monitoring, evaluation, and learning stages.

THE RESPONSE

Africa RISING took several proactive steps to address these multifaceted challenges:

Hiring a Gender Advisor. Heading into Phase 2, Africa RISING (IITA regions) was able to offset a significant portion of the cost of a senior international gender advisor by applying for and receiving a fellowship through GIZ's Center for International Migration. Additional budget was allocated for national staff and consultants to help with tool development and short-term activities.

Conducting a Gender Capacity Assessment. As an initial activity, the gender advisor conducted a [capacity assessment](#) at three levels:

- An evaluation of agricultural policies in Africa RISING countries on their conduciveness to gender-sensitive research for development (environmental level)
- A focus group discussion with management members on delineated gender core capacities (organizational level)
- A survey on the same core capacities among individual researchers (individual level)

The results from this assessment—analyzed by country and differences between management and researchers—allowed for a more evidence-based set of prioritized next steps. As the IITA project manager noted, “*results were not so encouraging ... but informative [and] helpful in designing next steps.*” For example:

- A majority of researchers (53 percent) indicated they did not have sufficient access to gender analytical tools for their research. A few months later, the gender advisor released an [annotated bibliography](#) of gender learning resources for researchers as an initial response.
- Although management perceived itself as committed to gender mainstreaming, researchers reported the lack of a mandate for gender mainstreaming. In 2017 the project produced a [Gender Action Plan](#) and launched a series of training courses for staff and partners (of which they have now trained half). An even clearer mandate would soon arrive in the form of a project-wide planning and indicator tool, the SIAF.

Action Planning. When Africa RISING adopted the [SIAF](#) in 2018, all project implementers were mandated to use it. The SIAF focuses on five domains—productivity, profitability, environment, human

condition (nutrition), and the social domain, which is where gender is explicitly referenced. It is both a planning and monitoring tool that encourages research teams to assess how the developed and validated technologies and interventions will influence sustainable intensification outcomes in these five domains.

The gender advisor seized on this Activity-wide shift in planning and developed facilitative processes to help guide teams to consider how gender affected the sustainability outcomes in all five domains (e.g., how gendered divisions of labor would affect the technology/intervention outcomes in the economic domain; or how women's access and agency related to technologies would shape the sustainable intensification of the productivity domain).

“This was a joint process of going through the domains, and that ... opened a door. Of course, I had to learn a lot, because I always have to learn about what they are doing. So, this was like getting closer to each other through the framework.” –Gender advisor, Africa RISING

The gender advisor reported that using the SIAF has dramatically increased demand for gender analysis and gender mainstreaming. To facilitate linking of planning to research, the gender advisor shared her process, summarized in the box below.

Africa RISING Uses the SIAF as a Planning Tool: A How-To for Working with Teams to Identify Gender Priorities in Research

When a specific innovation or set of innovations is assessed, the Africa RISING gender advisor creates a big poster with the five SIAF domains and starts drafting the social science questions for each domain. In theory, gender shows up most explicitly in the social domain (the fifth SIAF domain), but in practice, gender analysis should occur in each domain to achieve better-targeted research and assessment of innovations. When the gender advisor meets with groups of researchers—biophysicists and economists leading research on this specific innovation—they go through the entire framework and discuss the questions. This is an opportunity for the gender advisor and the researchers to learn and determine what is relevant and irrelevant. At times, biophysicists and economists bring up additional social science questions that are grounded in their own field experience but never come out, because they are rarely asked to frame them.

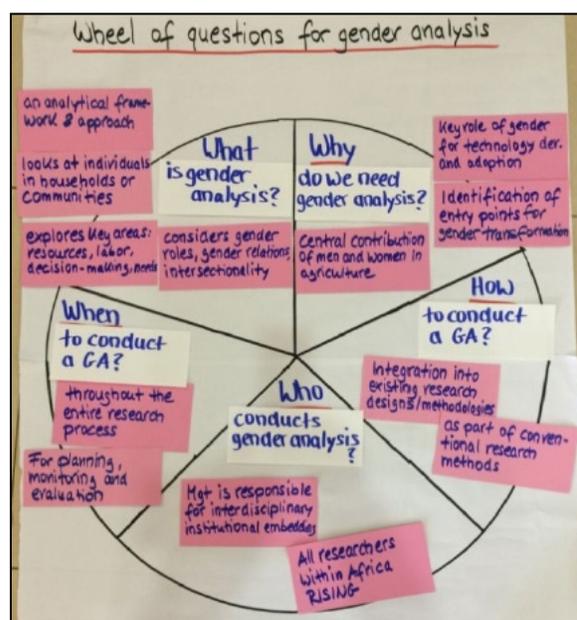
After discussion, the team narrows its focus on the questions that make the most sense for the research, and the gender advisor assigns the different questions the team wants to investigate to different tools. For example, if they are looking at labor (in the economic domain of the SIAF), they may use an activity profile or a drudgery score. Typically, the gender advisor uses a combination of short surveys, focus group discussions, and participatory tools.

Once all the questions are assigned and tools are developed, the gender advisor goes to the field with the research teams to collect data, which are analyzed and reflected back into the SIAF domains as a way to understand gender across the domains and facilitate more evidence-based and gender-responsive research.

Learning by Doing: Concrete Integration into Research Studies and Analysis. To further support researchers to integrate gender in their research, the gender advisor emphasizes learning by

doing—working alongside integrated teams to refine tools, collect data, and conduct exercises. In March 2019, she published the [Gender Analysis in Farming Systems and Action Research: A Training Manual](#), which has been used for Africa RISING gender training in Ghana, Malawi, Mali, and Tanzania. The training provides simple, hands-on exercises and capacity-development tools and lays the foundation for field-based research. Examples include:

- **Linkage diagrams** – a participatory exercise to identify gender-relevant issues in the context of an agricultural technology
- **“Wheel of questions”** – an exercise to draw out the what, why, when, how, and who of gender analysis (see the photo at right)
- **Sample surveys** – to practice integrating gender into a questionnaire (e.g., to inform selection of a forage chopper)
- **Skills-building and templates – activity profiles, daily activity clocks, and seasonal calendars** as useful analysis tools, especially around labor and relationship to technology
- **A matrix scoring participatory exercise** based on the SIAF



The Activity is now conducting gender-sensitive research in Ghana (maize technologies), Mali (vegetable breeding), and Tanzania (climate-smart technologies), and has produced several briefs on the research findings (available at <https://africa-rising.net/category/gender>).

THE LEARNING

The IITA project manager shared a key adaptation IITA made to the SIAF. In the first year, researchers were only mandated to choose progress monitoring indicators in one of the five domains. Almost everyone chose productivity, because it was the easiest and the closest to the data they already had. In 2019, everyone was required to select two indicators from each of the five domains. This created a stronger enabling environment for gender integration by ensuring the social domain was not deprioritized in actual monitoring. Another area of learning centered on finding resource-light ways to integrate gender into existing research, rather than conduct standalone studies. As the gender advisor noted:

“I think a lot can be done just by integrating a couple of gender analysis questions, and by doing the right thing in order to create and establish sex disaggregated data. very often it’s more about developing good tools that consider gender, and even without more money, or just a little bit more money, you can collect good data that can help you to gain new insights. So often it’s

about rethinking what you are doing anyway in order to achieve more gender integration.” –Gender advisor, Africa RISING

THE FUTURE

Africa RISING expects to continue learning from multiple rounds of using the SIAF in practice, including with an expanded set of indicators to monitor and reflect on. Echoing similar observations from gender advisors in other Activities in this study, the gender advisor also emphasized a desire to layer more gender-transformative approaches to enhance outcomes. This would include, for example, specific activities designed to address gender-based access and agency barriers that restrict uptake of technologies or reinforce negative unanticipated outcomes from technology adoption within a household farming system.

As the gender advisor said, “*gender integration is not a state, it's a process.*” For Africa RISING, this is a process that will continue.

CONTACT

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CASE STUDY

FOLLOW THE LEADER: Gender-Specific Research Project Provides the How-To in Horticulture

INTRODUCTION

Given the potential for horticulture to have substantial benefits for women, the Horticulture Innovation Lab (Horticulture IL) prioritized gender in its research programming. The challenge the IL faced was that most horticultural researchers did not fully grasp gender concepts or realize the relevance of gender in their research, which made it difficult to fully operationalize guidance. Through a gender-specific sub-award, the Horticulture IL sourced capacity-development services for their research teams from peer experts who were actively demonstrating best practices in gender-responsive research in horticulture.

THE CHALLENGE

Historically, the Horticulture IL has had strong leadership support for gender integration, with the previous director leading the charge within the management entity. However, most Horticulture IL researchers are horticultural scientists and economists without training in gender dynamics and gender integration in research, so it can be challenging for them to grasp gender concepts and the relative importance of gender in their work. The IL distributes gender integration guidance with requests for proposals to ensure researchers consider gender and integrate it into their projects. Yet the IL often did not see approaches that reflected that guidance in proposals or implementation. They realized more gender capacity-development work was needed for researchers to fully own the design and implementation of gender-responsive research.

Activity Highlights

Name: Horticulture Innovation Lab

Lead Institution: University of California, Davis

Core Countries: Bangladesh, Burkina Faso, Cambodia, Guatemala, Guinea, Honduras, Kenya, Nepal, Rwanda, Tajikistan, Tanzania, Thailand, Uganda, Zambia

Value of Award: \$18.7 million

Period of Performance: 2014–2019

Scope: To improve smallholder farmers' abilities to grow and sell high-value crops, resulting in higher profits and diversified, nutrient-rich diets



“Many of them initially weren’t opposed to thinking about gender, but it had just never occurred to them that it was an issue. I think that the greatest challenge was just sort of the technical-social science gulf.” –Gender advisor and principal investigator, Women in Agriculture Network (WAgN) project

THE RESPONSE

The idea to fund a gender-specific sub-award was borne out of the desire to dive deeper into gender, address the “technical–social science gulf,” and improve research teams’ capacity to better understand and integrate gender. The WAgN project, a 5-year, \$1.5 million investment by the Horticulture IL, was issued to Penn State University to analyze how the horticultural value chain could be a mechanism to support equity and empowerment for women and other marginalized groups. The sub-award included assistance to the Horticulture IL and its gender initiatives, such as building partner universities’ and research institutes’ capacity in gender integration.

The WAgN project sub-award was an attempt to **leverage the credibility and expertise of another institution** for capacity development, while using that expertise to conduct focused gender research in horticulture. Penn State University provided on-demand consultants for other research projects in design or implementation stages. Approximately 40 to 50 percent of research projects funded by or seeking funding from the Horticulture IL contacted their team for gender integration support, including advice on gender integration in projects “beyond just numbers,” and review of analysis tools and recommendations on how to better incorporate gender in research tools.

In addition to providing on-demand technical assistance, the WAgN project team delivered training and facilitated conversations around gender at annual meetings. One success of this arrangement was that the sub-award made the Horticulture IL’s accountability an integral part of the effort; while the WAgN project delivered training, the IL provided time in its annual meetings, which indicated to researchers that gender-responsive research was a priority for the IL.

“There was the content, but also the symbolism of doing that. I think that’s valuable.” –Gender advisor and principal investigator, WAgN project

Because the majority of the IL’s staff and other principal investigators participated in the annual meeting, the project was able to build in short workshops that incrementally layered on each other and had substantially better results than one-off training. Each year, they would start with a “Reader’s Digest” version of the prior year, and then build on it with progressive training topics, as the figure below illustrates.

Progression of gender training topics covered in annual meetings



Beyond being a venue for layering training over the years, the annual meetings were also a place for research colleagues to be exposed to the WAgN project’s gendered research practices, including best practices, lessons learned, and key tools and approaches. The following were some of the topics they shared in recent annual meetings:

- **Foregrounding Gender** – lessons from farmer field schools in Honduras, including the importance of incorporating community groups in the design to ensure timing, location, and childcare services work for women’s schedules
- **Women’s Empowerment in Agriculture Index** – an overview of the instruments, what the index measures, how it can be used, pros and cons, and findings from the WAgN project as an example
- **Value of Mixed-Sex Research Teams** – discussions on gender in research and building the awareness and diversity of research teams and partners
- **Gender and Horticulture** – considerations regarding outreach, including participatory outreach and research tactics and tools, and discussion of Agarwal’s typology of participation and how to ensure meaningful participation of women

Exposing researchers to the WAgN project’s gendered research practices created opportunities for other research projects to reflect on how gender dimensions affected their research and outreach in a variety of cultural contexts. As annual meetings progressed, there was a noticeable difference, according to the Horticulture IL, in researchers’ ability to take what they had learned and attempt to incorporate it in their work. This was apparent in the elevated level of discussion, sharing out, and reflection around gender that happened at subsequent years’ annual meetings. For example, one researcher shared with the Horticulture IL that they had become more aware of the importance of gender to their research and outreach in Zambia. In their project, they taught women how to grow vegetables and connected them to local hotels, resulting in substantial increases in income. The researchers had decided not to involve the husbands in the project, for fear they would attempt to control the money their wives had earned; however, as a result of their exclusion, one of the husbands destroyed the women’s plots. The researcher indicated that this was an “Aha!” moment for them, that in any research and outreach, one must bring the women *and* the men along.

THE LEARNING

From the beginning, the Horticulture IL learned that guidance does not mean people have the capacity to implement it. For people to understand and operationalize gender guidance, they need to have opportunities to build their capacity and receive targeted support. They learned that one-off training as a standalone capacity-development tactic for gender integration was insufficient, and that ongoing engagement through webinars and layered, incremental capacity development are more effective in shifting mindsets regarding the relevance and importance of gender integration in research objectives.

“I think, across the board, I definitely believe our teams are more aware. And I think many of them have a strong appreciation for the benefits horticulture can have for women, and see women’s engagement and empowerment as central to what they’re doing. There’s probably at least a handful left who need some more convincing and don’t necessarily see it as central.” –Director, Horticulture IL

Similarly, the demand for gender integration support usually came from the research projects that had already integrated gender, while the research projects that needed the most support often did not reach out and engage the WAgN team.

“It’s kind of like, I don’t know if you’ve taught, but it’s like the best students come to office hours. The projects that were already doing a very good job with gender that brought us in to see if they could do any better.” –Gender advisor and principal investigator, WAgN project

THE FUTURE

The Horticulture IL expressed a desire to continue collaborating with Penn State University. The sub-award generated valuable learning, and was a critical step in building the awareness and capacity of researchers, and there was interest in exploring a more intimate partnership so gender experts would have more influence and responsibility over the design and evaluation of gender-responsive research. The Horticulture IL is exploring how to bring in social scientists to agricultural research across the IL.

CONTACT

For more information on the Horticulture IL’s gender work or the WAgN project, contact Elizabeth Mitcham at ejmitcham@ucdavis.edu or Janelle Larson at jbl6@psu.edu.

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CASE STUDY

HARVESTING LEARNING AND APPLYING INSIGHTS: Evolving Models from the Integrated Pest Management Innovation Lab

INTRODUCTION

Since its beginnings in 1993, the work of the Integrated Pest Management Innovation Lab (IPM IL) work has undergone a significant change and adaptation in their approach to gender integration in research. Personnel, budgeting, and strategy (or operational models) have adapted in the course of five phases of the IL, based on learning around how to advance gender-responsive research. The IPM IL has evolved in its research practice, bringing in new and adapting established mixed-method tools and approaches to facilitate improvements in gender-responsive research and learning. The IL has applied, adapted, and improved these tools and approaches in gender-focused and gender-informed IPM research to better understand the transformative effects (positive and negative, intended and unintended) agricultural solutions can have on male and female farmers.

Activity Highlights

Name: Integrated Pest Management Innovation Lab

Lead Institution: Virginia Tech

Core Countries: Bangladesh, Cambodia, Ethiopia, Kenya, Nepal, Tanzania, and Vietnam

Value of Award: \$18 million (leader award)

Period of Performance: 2014–present (Phase 5)

Scope: To develop and implement a replicable approach to integrated pest management that reduces agricultural losses due to pests, damage to natural ecosystems, and pollution and contamination of food and water supplies

THE CHALLENGE

Across a series of funding phases, the IPM IL has explored how to support a large portfolio of agricultural research that integrates gender in meaningful and informed ways. In previous phases, operational models often left gender-focused research siloed in discrete research projects, or were limited in supporting more gender-responsive extension messages and dissemination platforms. In a phase where the IPM IL funded only one gender-specific sub-award, the director noted the challenges of getting other research project principal investigators to take ownership of gender integration in their research and activities:

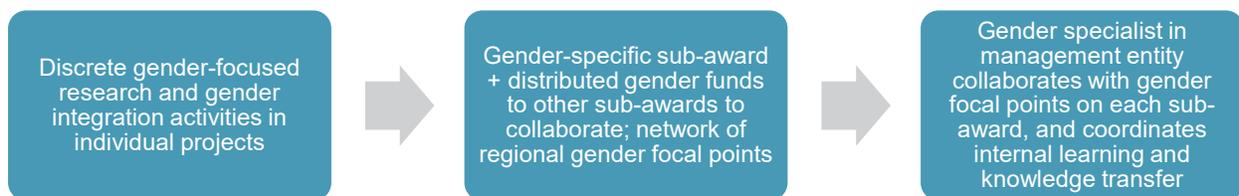
“Their attitude was, ‘Well, you got the [gender] funding, and you have the [gender] projects, so you go ahead and do the work.’” –Director, IPM IL

THE RESPONSE

Building on lessons learned from previous phases, in Phase 5, the IPM IL invested in a part-time (30 percent level of effort) gender specialist within the management entity. The gender specialist provided technical assistance and capacity development to research projects and supported gender monitoring, evaluation, and learning. The gender specialist worked with counterparts across the seven countries and eight research projects the IPM IL currently implements, ensuring gender was not siloed and insights and learning from one context were harvested and applied in other contexts. The figure below illustrates this progression of gender integration from Phase 3 to Phase 5.



Progression of operational models for gender integration



The IPM IL gender specialist views his role as an enabler and a facilitator. He supports gender focal points, research teams, and the broader IL to develop capacities, systematize tools and approaches, and facilitate harvesting of learning and application of insights across agricultural research projects. His vision of success is when every research project:

- Conducts gender analysis or gender-integrated needs assessment relevant to stakeholders or beneficiaries
- Develops an informed gender approach that fits research objectives
- Examines how to facilitate the inclusion of women and men in outreach activities, including a gender-specific outreach product
- Monitors and evaluates how women and men benefit from IPM technologies and practices, including any unintended or negative impacts
- Shares knowledge and learning internally, with other partners in the country, and within the academic community

To achieve this vision, the IPM IL gender specialist engages with researchers and gender focal points at multiple points throughout a research project, including through capacity development and informal but established learning mechanisms. Learning mechanisms include exchanges at annual meetings, quarterly project update calls with principle investigators and gender focal points, and technical advisory

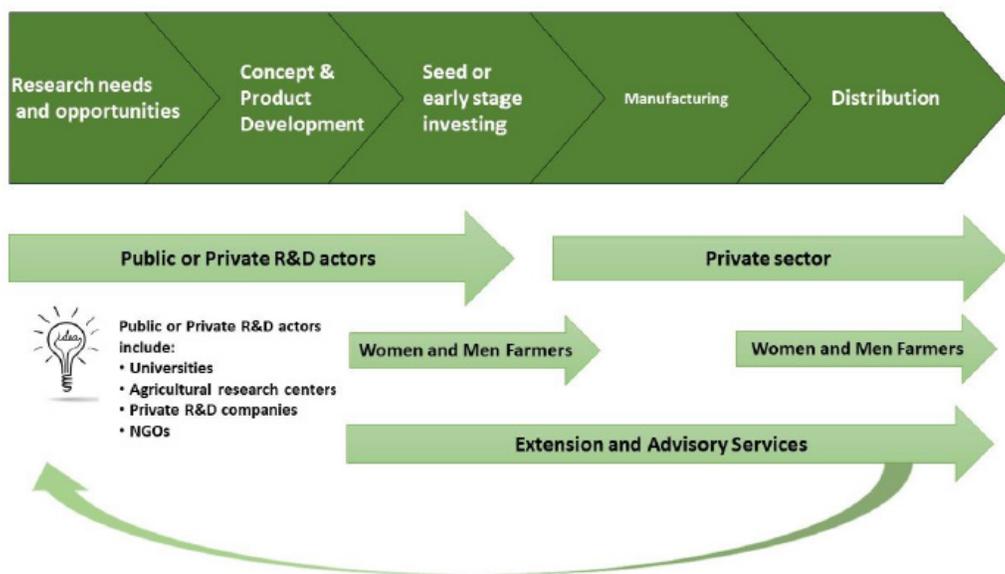
committee meetings. These are all entry points, where the gender specialist can learn more about what is happening and encourage researchers to reflect on their efforts. For example, in training sessions with researchers, the gender specialist has encouraged them to reflect on strategies and approaches they use to engage women and men in short-term training, and the effectiveness of those strategies.

“We can use that learning in the context of that project [to] redirect or change course.” –Gender specialist, IPM IL

As a result, several principal investigators started to document what was going well and what they might do differently, in addition to the strategies they use. They have also begun to apply that learning to the design of future outreach activities. To assist research partners with collecting those insights, the gender specialist promoted the application of a checklist of tactics and considerations to encourage female participation in research and outreach activities. (The checklist was created in Phase IV of the IPM IL by Dr. Maria Elisa Christie – Virginia Tech, PI IPM IL Gender Global Theme; Alifah Lestari – FIELD Indonesia Foundation, IPM IL SE Asia Regional Gender Coordinator; and Margaret Mangheni – Makerere University, IPM IL East Africa Regional Gender Coordinator.)

Another area of harvesting and applying learning is in gendered considerations of technology. The IPM IL has adapted a toolkit—the [Integrating Gender and Nutrition within Agricultural Extension Services \(INGENAES\) Assessing How Agricultural Technologies Can Change Gender Dynamics and Food Security Outcomes](#)—to use with research projects and better understand the potential gender-related impacts of specific agricultural technologies on men and women in design, use, and dissemination. This includes looking at the technology development pathway illustrated below and assessing the gendered impacts of developed and introduced IPM technologies and packages.

Technology development pathway from INGENAES technology assessment toolkit



The IPM IL has recommended that research projects plan and conduct gender impact evaluations to capture intended and unintended effects of technology on males and females. This information has helped the IL pivot and make course corrections when technologies have proven to have negative unintended impacts on women or when project outreach and dissemination activities have failed to engage women producers. In Vietnam, for example, gender-focused research identified that despite being interested, women were not as engaged as men in technical training or field demonstrations because men were traditionally engaged in on-farm pest management work. In response, the IPM IL developed a capacity-development program that worked with women's unions to deliver skills training on IPM principles and practices, financial management, and market conditions to women.

As part of capturing stronger evidence and learning, IPM IL is piloting a gender-focused qualitative evaluation that uses the Most Significant Change method. (The IPM IL drew on the evaluation approach that the Learning for Gender Integration Initiative developed through a Program Improvement Award funded by USAID's Technical and Operational Performance Support Program and secured by Lutheran World Relief. Cultural Practice led the design of the evaluation methodology and toolkit.)

The evaluation assesses how the gender dimensions of pest management (and agriculture) shape dissemination and application of IPM technologies and practices developed and promoted through the International Rice Research Institute's "Ecologically-based IPM packages for rice (EPIC)" project in Cambodia. The evaluation will allow the IPM IL to document potential gender-related impacts.

Questions in the interview guide focus on:

- Advantages and disadvantages of EPIC-recommended rodent management practices
- Pest management time use and labor
- Decision making and pest management
- Personal development (e.g., confidence in interactions with others, status in the community)

Initial evaluation results suggest that recommended rodent management practices engendered greater involvement of women and children, especially in setting traps and collecting trapped rats, and reduced time spent on rodent management for males in rice farming and for females in existing off-farm businesses. The qualitative evaluation methodology has yielded contextually rich and relevant information that the IPM IL will use to further investigate how gender norms shape decisions linked to applying IPM practices and technologies and the advantages and disadvantages that women and men experience from applying IPM in other contexts.

THE LEARNING

The IPM IL's evolution in gender integration has come from reflecting on what is working and what is not, and applying insights at the research project and Activity levels. The IL has found that a centralized gender advisor who is well connected with gender focal points and researchers is crucial to achieving progress in gender-responsive research. While they have made substantial strides to develop a culture of learning where information is harvested, reflected on, and (in most cases) applied, many of the processes are not yet fully formalized, although there is a desire to do so.

The IPM IL has also faced a challenge in getting biophysical scientists to see gender as relevant to their research objectives. Although this can be an impediment to advancing gender-responsive research and learning processes, the IPM IL has invested in capacity development through formal, structured workshops, informal webinars, and coaching to help improve awareness and shift mindsets.

“[E]ven though we’ve seen a lot of improvement this phase, there are still difficulties to building a dialogue between our bio-physical scientists, our plant pathologists, our entomologists, with our social scientists, so they can communicate effectively with each other, and see that they all have the same priorities.” –Gender specialist, IPM IL

THE FUTURE

As the IPM IL continues to refine and build its analytical and monitoring and evaluation tools, there are opportunities to collaborate with others who work with the same types of tools to share practices, resources, and learning, especially related to technology assessments and continued learning around the Abbreviated Women’s Empowerment in Agriculture Index. The IPM IL would like to progress toward more gender-transformative approaches in research and learn from other gender experts about tactics and benefits. Engaging men in the context of pest management is another area the gender specialist would like to focus on, given a general lack of this topic in agricultural research.

“What they’ve done and what we’ve done, we can share and complement to further refine the tools that best meet all research for development needs and priorities.” –Gender specialist, IPM IL

CONTACT

For more information on the IPM IL’s gender work, contact Muni Muniappan at rmuni@vt.edu or Daniel Sumner at dmsumner@vt.edu.

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