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INTERVENTION GUIDE FOR THE WOMEN'S EMPOWERMENT IN AGRICULTURE INDEX (WEAI)

**PRACTITIONERS' GUIDE TO SELECTING AND DESIGNING WEAI
INTERVENTIONS**

LEO

Leveraging Economic
Opportunities

LEO REPORT #10



March 2015

This publication was produced for review by the United States Agency for International Development. It was prepared by Michelle Stern, Lindsey Jones, and Marya Hillesland of ACDI/VOCA with funding from USAID/E3's Leveraging Economic Opportunities (LEO) project.

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

ACKNOWLEDGEMENTS

This document is based on a review of empirical literature, development practitioners' case studies, and publicly available resources and tools related to gender, agriculture, and market systems development. It was informed by the review of Ruth Campbell, Anna Garloch, and Daniel White of ACIDI/VOCA; Sylvia Cabus, Jeannie Harvey, Krista Jacobs, Kristin O'Planick, Farzana Ramzan, and Jennefer Sebstad of USAID; and Ruth Meizen-Dick and Hazel Malapit of the International Food Policy Research Institute (IFPRI). Their contributions to this paper are gratefully acknowledged.

Empirical research, practitioner experience, and the library of resources available to guide gender equality and women's empowerment in agricultural market systems is constantly growing. It is expected that the authors will update this guide in a revised edition at a later date. To inform these revisions, the authors welcome readers to share their comments and suggestions as they read, use, and apply this guide. Please submit your comments and suggestions to the authors at this link:

<https://www.surveymonkey.com/s.aspx?sm=lSadLvVueHk05NQAjhJn8Q%3d%3d>

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THE PURPOSE OF THIS GUIDE

The *Intervention Guide for the Women's Empowerment in Agriculture Index (WEAI)* provides guidance to donors and implementers of agricultural market development programs on how to translate into practice the evidence and insights gained from the WEAI survey results. The WEAI was developed by the United States Agency for International Development's (USAID) Feed the Future Initiative, the International Food Policy Research Institute (IFPRI), and the Oxford Poverty and Human Development Initiative as a direct measure of economic empowerment and gender parity at the individual and household levels. This guide assists practitioners in selecting and designing evidence-based interventions that are the most relevant to the domains of empowerment prioritized in the WEAI, using a market-systems and gender-responsive approach. While the primary users of this guide are expected to be implementers and managers of Feed the Future projects, it may also be relevant to local stakeholders and other donors and implementers who are engaged in livelihoods and gender.

This guide starts by giving an overview of the WEAI. It then defines the inclusive market-systems and gender-responsive approaches that form the foundation of the proposed interventions. The guide then presents the interventions, which are organized according to the five domains of empowerment used in the WEAI survey. Within each domain, there are a number of activities that could work in inclusive market-systems projects funded by USAID and other donors.

While this guide was designed for use in Feed the Future programming, the concepts are broadly applicable, and proposed interventions can be adapted for any agricultural market systems development program. It is important to note that the guide could not include all possible interventions, and the interventions included are intended to be illustrative. Given the dynamic nature of gender norms and market systems, the applicability of these interventions will vary by context. Practitioners are encouraged to use this guide as a reference and not a checklist. Finally, because the empowerment domains are interlinked, a number of interventions will contribute to more than one domain.

WHAT IS THE WEAI?

The WEAI was launched in February 2012 as an innovative tool for measuring, evaluating, and learning about women’s empowerment and inclusion in the agriculture sector. USAID is using the WEAI to measure and track changes in women’s empowerment that occur as a direct or indirect result of Feed the Future interventions. The WEAI is also used as a diagnostic tool to identify geographic areas where women and men are disempowered and to target policy and programming in those areas.

As an aggregate index, the WEAI shows the degree to which women are empowered in their households and communities and the degree of inequality between women and men within the same household. It is composed of two subindices:

- Five domains of empowerment (5DE): This subindex assesses whether women are empowered across five domains: 1) decision-making power over agricultural production; 2) access to, and decision-making power over, productive resources; 3) control over use of income and expenditures; 4) leadership in the community; and 5) control over one’s time and satisfaction with available leisure time.¹
- Gender parity index (GPI): This subindex measures women’s empowerment relative to men within the same household by comparing the 5DE profiles of women and men in the same household.

In Feed the Future countries, a WEAI survey is typically carried out at the zone-of-influence level and integrated into a larger population-based survey.² USAID missions often use an external consultant or a local monitoring and evaluation (M&E) organization to carry out these population-based surveys every two-three years. The results from the WEAI survey should be analyzed using USAID’s Gender Integration Framework (GIF), which is a framework to help practitioners analyze the findings from the WEAI.³ Donors and implementers can use the GIF as a planning tool to examine the findings from the WEAI survey gender analyses and other sex-disaggregated sources of data to prioritize what domains to focus on. Used together with the GIF, this guide will inform practitioners how best to design and implement interventions that will respond to country-specific findings from the WEAI surveys.

For a comprehensive set of resources and information about the WEAI, go to the WEAI resource pages on Feed the Future’s and IFPRI’s websites.⁴

¹ Note that the Feed the Future initiative has identified two additional domains that are critical for women’s empowerment in agriculture but that are not explicitly included in the WEAI survey. The domains are 1) human capital, which is defined as having adequate skill and knowledge of activities that could improve an individual’s economic situation; and 2) technology, which is defined as having access to beneficial technologies. This guide was designed around the original five domains, and activities that might fall under the two new ones are integrated throughout.

² The geographic area targeted by Feed the Future interventions in a given country is referred to as the “zone of influence.”

³ Resources and a webinar on how to use the Gender Integration Framework are available on Agrilinks: agrilinks.org/events/increasing-feed-future-impacts-through-targeted-gender-integration.

⁴ WEAI Resource Center at www.ifpri.org/book-9075/ourwork/program/weai-resource-center. See also the Feed the Future WEAI page: www.feedthefuture.gov/lp/womens-empowerment-agriculture-index.

CASE STUDY: APPLYING THE WEAI IN GHANA

The WEAI was conducted under a USAID contract in Ghana in 2012. Results showed that 73 percent of the women in the zone of influence are disempowered. Key findings include the following:

- Control over resources and production decisions together account for nearly 60 percent of women's disempowerment in the target area.
- Sole control over income use contributes the least to women's disempowerment.
- Resources contribution to disempowerment was 31 percent.
- There are three components of the resources dimension: asset ownership; asset purchase, sale, or transfer; and access to, and decisions about, credit.
- Control over credit decisions alone accounted for about 42 percent.
- Control over asset ownership accounted for the smallest contribution from the resource domain to inadequacy, only about 22 percent.

This information has been used to drive program design in the Feed the Future portfolio of projects. For example, the Ghana Agricultural Development and Value Chain Enhancement (ADVANCE) II project, implemented by ACDI/VOCA, has several activities that are designed to address the identified causes of disempowerment. The project has been working with rural banks to offer aggregation loans and input credit to mixed and women's groups, as well as to provide training on topics such as credit management, group dynamics, savings, insurance, business management, and marketing. The aim is that some women will graduate from this program and start taking individual loans. ADVANCE has been encouraging groups to use their savings to invest in equipment or save for the next planting season. The project is also promoting a system whereby smallholder farmers receive services and inputs from nucleus farmers and aggregators that they repay in cash or in-kind after the harvest. There is strong evidence that repayment rates for women are higher than for men, and nucleus farmers are now intentionally targeting women in expanding their outgrower membership. At the same time, messages about shared decision-making among household members and equitable access to resources have been embedded into capacity-building efforts such as farmer field days and Farming as a Business training.

The WEAI will be carried out again in 2015 and 2017 to measure progress.

A MARKET-SYSTEMS APPROACH TO WOMEN'S EMPOWERMENT IN AGRICULTURE

The suggested WEAI interventions in this guide are based on a gender-responsive, inclusive market systems development approach. This section explains what is meant by inclusive market systems development and a gender-responsive approach to empowerment.

MARKET SYSTEMS CONTEXT

A market system is a dynamic space where private and public actors interact over the production, distribution, and consumption of goods and services. It includes the resources that are available within the system, the roles and relationships of actors within the system, the rules that govern the system, and the outcomes that result from the interactions within the system. An inclusive market system development approach focuses on building the capacity and resilience of local systems; leveraging the incentives and resources of the private and public sectors; ensuring the inclusion of groups that are often excluded—and in some cases exploited; and stimulating change and innovation that continues to grow beyond the life of the project (Campbell 2014). Women's empowerment is an important part of developing inclusive market systems. It involves interventions that enable equal access to resources, as well as interventions that catalyze women's agency so that women are able act upon the acquisition of those resources and influence the market system itself (Markel and Jones 2014).

A key principle of market systems development is the facilitation approach. Development projects that take a facilitation approach focus on stimulating long-lasting, sustainable change within the system instead of directly intervening and becoming part of the system. A facilitation approach works to change relationships between actors and introduces new practices that result in changes within the system that are sustainable after a development project is over. Projects applying a facilitation approach avoid directly providing services in order to foster greater ownership by market stakeholders in interventions, encourage scale of outreach, and support more sustainable results (“Understanding Facilitation” 2012).

According to current best practice in gender and development, any development project's gender strategy is designed to mainstream gender into all of its activities. This may include a recognition that female smallholders and entrepreneurs are often unable to take advantage of market opportunities because they lack access to needed resources and are highly vulnerable. Projects need to adapt their market systems strategies to address this. Practitioners may find that female participants initially need some additional assistance to prepare them to fully participate in, and benefit from, facilitated market systems support. Interventions that address household needs and build assets can help vulnerable women advance to a state of market readiness. Projects may also identify a need for interventions that might be considered outside of the scope of many market-focused projects, such as literacy and numeracy training. Once women are equipped with the resources and skills needed to engage in markets, they can benefit from the sustainable relationships developed through a facilitated approach. At the same time, other stakeholders in the value chain can be educated on the economic and social benefits of engaging with female smallholders in order to leverage and catalyze commercial incentives for investment in agricultural supply chains that incorporate women.

This guide presents activities that are suitable for women at different stages of development. The WEAI, in tandem with project market systems and gender analyses, can help implementers determine which level of support is the most appropriate at start-up, and what interventions will address the specific constraints women face in the targeted country, region, or value chain(s).

A GENDER-RESPONSIVE APPROACH TO EMPOWERMENT

A gender-responsive approach recognizes the importance of understanding and addressing the informal and formal gendered rules and institutional arrangements that influence women's and men's ability to experience empowerment. These rules include informal social norms about the value, roles, responsibilities, and power relations of women and men based on gender (Markel and Jones 2014). A gender-responsive approach also acknowledges that empowerment is a complex process that will vary by context and individual. It is in many ways an internal process; it cannot be forced by outsiders. The WEAI was designed not necessarily to measure internal processes of empowerment, but instead to measure the conditions that enable empowerment (Hillesland). With that in mind, this guide presents interventions that can create conditions for enabling empowerment. Still, there are no simple solutions. Users of this guide must be careful not to consider it a one-size-fits-all approach.

IS THERE SUCH A THING AS A “WOMAN’S CROP”?

It is common to hear references to “men’s crops” and “women’s crops.” Yet it is not so straightforward; men and women rarely take on such differentiated roles in production and along the value chain. Their roles and authority fluctuate over time and in different contexts. In some cases, men and women work and make decisions together, and in other cases their roles and tasks are divided. Researchers at IFPRI describe the complexity of household decision-making processes: “when there is disagreement within a household, its resolution may depend on the bargaining power of individual household members. Sociocultural context and intrahousehold resource allocation rules determine who within the household has access to a particular resource and for what purpose.” They may also determine who benefits from the profits or consumption of the crop. Gender analysis helps implementers understand this context.

Source: Quisumbing et al., “Closing the Gender Asset Gap,” 2014

GENDER ANALYSIS MUST PRECEDE ALL INTERVENTIONS

Because empowerment is a complex process, gender analysis is necessary to understand the local context before selecting and determining activities. Gender analysis should be used together with the WEAI and other relevant data to analyze the context and prioritize domains of empowerment, which can be done as part of the Gender Integration Framework, discussed above. This guide serves as a resource that implementers can use after they’ve completed a gender analysis; it cannot be used to replace gender analysis.

USAID defines gender analysis as “a social science tool used to identify, understand, and explain gaps between males and females that exist in households, communities, and countries. It is also used to identify the

relevance of gender norms and power relations in a specific context” (USAID ADS 205). There are many resources and tools on gender analysis, so this guide will not discuss the topic in depth.⁵

It is now a requirement for USAID program offices and technical teams to incorporate the findings of gender analysis throughout the program cycle in their country strategies and projects. In 2012, USAID adopted several comprehensive and interlinked policies and strategies that support gender analysis. The goal is to reduce gender inequality and enable girls and women to realize their rights, determine their life outcomes, influence decision-making, and become change agents in households, communities, and societies. USAID’s automated directives system (ADS) provides an outline of the official operational policies and explains how to implement these new policies and strategies—including gender analysis—across the program cycle.

Gender analysis informs the project design to ensure that it explicitly addresses any disparities and includes actions to reduce the inequalities that are revealed. The gender analysis provides an in-depth look at issues relevant to the project, which is not provided by the WEAI. The WEAI identifies indicators that contribute to empowerment and disempowerment; gender analysis provides microlevel detail to help flesh out the design of interventions.

THE DIVERSITY OF HOUSEHOLD TYPES

Most Feed the Future projects encounter a range of household types, including nuclear families, polygamous homesteads, extended family homesteads, and single female-headed households. Female-headed households can be broken down into two types: **de jure** female-headed households, in which the female head is single or widowed; and **de facto** female-headed households, in which the male partner does not permanently reside, and while he can influence larger decisions, by and large he is not involved in day-to-day decisions and activities. In each of these situations, women face different challenges and opportunities that relate to their participation and ability to succeed in market activities, and practitioners may need to consider different approaches.

UNDERSTANDING WOMEN’S EMPOWERMENT IN A BROADER SOCIAL CONTEXT

A gender-responsive approach recognizes that empowerment processes for men and women may differ. While empowerment of both men and women in agriculture is important, this guide focuses primarily on activities that could be used to help empower women with the assumption that women’s empowerment is often more likely to be overlooked when implementing interventions. In thinking specifically about women’s empowerment, it is important to recognize that women are not a homogenous group. Users of this guide must be careful to avoid generalizations about women’s circumstances and what “works” for women’s empowerment across different communities and socioeconomic contexts. For example, the circumstances of widows or single women differ from those of married women. Women of an ethnic or social minority often experience multiple forms of discrimination. Women who own land or who can access it through their husbands may have more income opportunities and less vulnerability than women who do not. Age is also an important factor to consider; research shows that young women have different incentives and will make different choices than older women (USAID Youth in Development Policy 2012). Age can also influence an individual’s ability and bargaining power to make importation decisions. Finally, these power relations and

⁵ In addition to the USAID ADS 205, see also USAID’s guidance on gender integration and analysis: www.usaid.gov/sites/default/files/documents/1865/201sab.pdf

incentive structures differ by geography and sociocultural context. When using this guide, practitioners must recognize that what worked in one region may not necessarily work in a different region.

SOCIAL AND BEHAVIOR CHANGE IS PART OF THE EMPOWERMENT PROCESS

A gender-responsive approach recognizes that social and behavioral change is part of the process of women's empowerment in agriculture. To stimulate a sustainable process of empowerment, the gender norms and relations that perpetuate an imbalance of power between women and men must change.

Research on behavior change in market systems and women's empowerment is still emerging (Sebstad and Manfre 2011). Much of the current knowledge about behavior change comes from the health sector. Research has shown that behavior change, like empowerment, is a complex process and requires a comprehensive approach with interventions at multiple levels (K4Health 2015). For example, this guide includes a few interventions related to behavior change communication and gender training, which are presented as being key to changing intrahousehold behaviors regarding power, authority, and decision-making over production, income, and time use. These interventions, while listed under specific domains, are relevant to all five domains addressed in this guide. However, it is important to note that these interventions, while important, are rarely sufficient for changing behavior by themselves. Changes in institutions, processes, business models, and policies can also contribute to behavior change.

For more information on how to strategically design and plan for behavior change, see the “Designing for Behavior Change for Agriculture, Natural Resource Management, Health and Nutrition” curriculum, which can help users of this guide select and sequence interventions and activities (Food Security and Nutrition Network Social and Behavior Change Task Force 2013).

SOCIAL AND BEHAVIOR CHANGE CAN PRESENT RISKS TOO

A gender responsive approach is prepared to mitigate, monitor, and respond to unintended adverse outcomes. Not all social and behavioral change is positive. Sometimes project interventions lead to unintended and negative changes in behavior, social dynamics, and gendered power relations. Some of these outcomes can be mitigated based on prior experience and research from other similar interventions and contexts.

Increases in gender-based violence (GBV) are a potential risk of any agricultural development project, regardless of whether it intentionally includes women's empowerment programming. The relationship between GBV and economic growth projects such as agricultural market systems development projects is

INTRAHOUSEHOLD VIOLENCE AND EMPOWERMENT INTERVENTIONS

USAID's “Toolkit for Integrating GBV Prevention and Response into Economic Growth Projects” reviewed literature on whether increases in women's access and agency leads to greater risk of violence in their homes. The toolkit concludes that “women's increased income generation, greater financial autonomy and asset ownership have shown mixed effects on violence against women. Some studies have found that violence against women may increase initially, but then reduce as a result of women's participation in economic empowerment programs or groups as household stresses decrease when women's incomes increase.”

Source: Toolkit for Integrating GBV Prevention and Response into Economic Growth Projects, USAID 2014

discussed in depth in USAID’s “Toolkit for Integrating Gender Based Violence Prevention and Response into Economic Growth Projects.” (Schulte, Williams, Rasic, and Morris 2014). As the toolkit points out, GBV disproportionately affects women throughout agricultural value chains, as employees, informal workers, producers, and household members. The toolkit provides a number of recommendations and resources for mitigating, monitoring, and responding to changes in GBV in agriculture, food security, and value chain development projects.

Development practitioners are often faced with a situation where men take control of the work and profits of an activity that women traditionally managed, once that activity becomes more profitable, commercialized, or mechanized. Interventions and activities such as those proposed in this guide can be designed to help protect women’s control of production, resources, and profits. It is important to note, however, that unintended outcomes of commercializing production, such as the one described above, are not always entirely negative. For example, a study of a commercialization activity in Busoga, Uganda, found that when the men took over control of production, there were some positive improvements in women’s bargaining power within the household (Sorensen 1996.) This example illustrates the importance of recognizing the complexity of the empowerment process.

USING THEORIES OF CHANGE TO HELP TO MANAGE THE COMPLEXITY OF EMPOWERMENT

Because behavior change and empowerment are complex processes, selecting a few of the activities in this guide without thinking through how they will lead to desired changes in behavior could lead to unexpected outcomes. A clear theory of change that is targeted to the project context will help users ensure they are selecting, combining, and sequencing the right types of interventions and activities.⁶

⁶ For more information about how to develop and apply a theory of change to your program, see: Andrea A. Anderson, “A Community Builder’s Approach to Theory of Change,” The Aspen Institute, www.theoryofchange.org.

DOMAIN I: DECISION-MAKING OVER PRODUCTION

This domain is defined as an individual having sole or joint decision making over food and cash-crop farming, livestock, and fisheries and autonomy in agricultural production.

The following indicators are used in the WEAI to measure decision-making over production: 1) input in productive decisions; and 2) autonomy in production.

Interventions that could increase women's decision-making over production may include

- Ensuring women's greater access to extension and advisory services;
- Supporting gender sensitization trainings that promote women's decision making over production.
- Using behavior change communication to promote women's decision-making over production

An important aspect in decision-making in agricultural production is having access to knowledge around innovative approaches and types of equipment available in production. Extension and advisory services help facilitate access to this knowledge. Unfortunately, extension services in general tend to be less available to female farmers than male farmers (Peterman, Behrman, and Quisumbing 2010; Doss 2001). For example, a recent study on extension services for maize in Malawi found that, while female farmers make up nearly 70 percent of the full-time farmers in Malawi, only one-fifth of the extension service sites nationwide included female farmers during the 1998-1999 season (Gilbert, Sakala, and Benson 2013).⁷ Another study reveals large gender inequalities in extension services in areas in Ethiopia, Ghana, and India (Madhvani and Pehu 2010).⁸

This section describes interventions that could increase women's access to extension and advisory services. Even with greater knowledge of innovative approaches and types of equipment available in production, however, women farmers may not be able to participate fully in decisions in agricultural production due to deeply ingrained beliefs and norms around gender roles. They may feel they cannot make decisions based on what they believe is right because it might go against social norms. To help address this, this section also includes interventions that foster women's confidence and decision-making abilities and that cultivate a greater awareness of gender norms around agricultural production among local actors.

INTERVENTION I.1: INCREASE WOMEN'S ACCESS TO EXTENSION AND ADVISORY SERVICES

⁷ This study looked at extensions services in Malawi for maize and found that female farmers make up nearly 70 percent of the full-time farmers in Malawi, but only one-fifth of the extension service sites nationwide included female farmers during the 1998-1999 season.

⁸ This World Bank and IFPRI survey from 2010 demonstrates women's poor access to extension compared to men in three countries: 20 percent of Ethiopian women were visited by an extension worker compared to 27 percent of men; in one region of Ghana between 0 and 2 percent of female-headed households had received extension visits compared to 12 percent of male-headed households; and in India 18 percent of female-headed households received extension visits compared to 29 percent of male-headed households

Many agricultural market development programs rely on training activities and capacity building to increase farmers' productivity. A market systems project would facilitate this type of extension and advisory service through existing market actors, such as private sector businesses, "lead" or "nucleus" farmers, local NGOs, or through partnerships with government ministries. Whichever approach is selected, the project needs to address existing gender gaps in access to these types of services.

One reason extension and advisory services may be less available to women than men is that extension workers are generally male, and much training for extension workers assumes that "farmers" are men. In some countries, studies suggest cultural or religious norms may limit women farmers' access to extension services (Ofuoku 2013; Budak, Darcan, and Kantar 2005; Due, Magayane, and Temu 1997). There is also evidence that extension services may favor farmers with larger areas of land and greater access to other inputs, who are less likely to be women (Doss and Morris 2001; Peterman, Behrman, and Quisumbing 2010). Additionally, women are more likely to be illiterate than men and illiteracy can make extension services less accessible to farmers (Doss 2001). It may also be that women are not aware of extension opportunities in their communities or that service providers assume trainees will share what they have learned with other household members, which is not always the case (Croppenstedt, Goldstein, and Rosas 2013). A recent 3ie Impact review highlights some specific reasons why farmer field schools were less available to female farmers than male farmers in different regions (see text box below). Since there are various reasons for women's lack of participation, successful approaches to improving female farmers' access to and participation in extension services will be tailored to the needs of each community.

WOMEN'S LACK OF ACCESS TO EXTENSION AND ADVISORY SERVICES IN FARMER FIELD SCHOOLS

Farmer field schools are not a one-way dissemination of information, but rather, are based on farmer experimentation. The purpose of this approach is to facilitate greater decision-making power around agricultural production and productivity. As such, availability of and participation in these types of interventions may foster greater empowerment around decision-making in agricultural production and productivity. Unfortunately, women are generally less likely than men to participate in farmer field schools. A recent review, "Farmer Field Schools: From Agricultural Extension to Adult Education," discusses the following reasons for this:

- Women are not present at village meetings where the program participants are selected.
- Women lack access to land or sufficient education to meet the program criteria.
- Women are not members of a particular organization.
- Women have household and childcare responsibilities that keep them from engaging in the services.
- Women fail to gain their husbands' permission to participate.

Source: Waddington and White, "From Agricultural Extension to Adult Education," 2014

ILLUSTRATIVE ACTIVITIES

- Identify existing constraints to women's participation in extension activities.
- Identify market actors who provide products and services relevant to women in agricultural production. Assist these actors in developing strategies to improve accessibility of their products and services to female farmers. For example, projects can assist market actors in analyzing their clientele data by gender

to see if there are any gender differences. Projects can help them to make adjustments to their business models, extension or advisory materials, marketing campaigns, staff recruitment or management strategy, or customer relations practices to improve services to this key female client base, as well as expand outreach to new clients. In doing so, consider scale, sustainability, and depth of impact on women.

- Equip service providers with guidance on how to address the differing needs of male and female farmers. Showcase local strategies that have successfully reached female farmers and have been beneficial to the service providers, too. Presenting potential early adopters with the business case for including women as well as strategies to engage women, can bring about desired behavior. As positive results are promoted, other service providers will be willing to replicate actions.
- Encourage service providers to set goals of targeting a certain percentage of women farmers in the community and assist service providers in adopting targeting strategies. These strategies could include:
 - announcing publicly that they want both women and men to attend the training;
 - encouraging or requiring both male and female decision makers in each household to attend training;
 - requiring implementing partners or grant recipients to train a minimum number of women farmers as part of their terms of agreement or contract, and encouraging participants to also train a minimum number of women;
 - reaching out to women's groups; the WEAI data can help identify what groups men and women engage in; and
 - if it is culturally inappropriate for women and men to be trained together, establishing separate spaces for training women.
- Support public and private sector service providers to make their trainings and technical assistance accessible to women by ensuring the materials and curricula are gender appropriate, the methodology is suitable for their level of education, and the trainings and extension sessions are scheduled at convenient times and locations.
- Use funds to stimulate creativity and innovation in female-inclusive service provision. For example, issue a call for proposals to public and private service providers to propose how they will sustainably reach a greater number of female farmers. The winner will receive cost-shared funding to initiate activities.
- Support ways to increase the number of female extension workers. These could include:
 - building the capacity of female service providers or women's organizations to carry out extension services—this might involve direct delivery of training to potential agents, partnerships with agricultural vocational schools from which agents are recruited, etc.;
 - encouraging partners to set targets for hiring more female extension agents as part of their grant agreements or contracts;
 - working with ministries that hire and train extension workers to increase the number of women agents;
 - working with national or private agriculture universities or colleges that train extension workers to encourage them to recruit and train more female students; and
 - working with vocational schools, national agriculture research institutes, and local agricultural institutions to promote agriculture as a viable profession for women.
- Put in place community-based extension services, so female agents do not have to travel as far.

- Identify and put in place other enabling factors that would allow more women to work as extension workers, such as providing travel allowances, encouraging teams that travel together, and sponsoring lessons in how to drive a motorcycle.

INTERVENTION I.2: SUPPORT GENDER SENSITIZATION EFFORTS THAT PROMOTE WOMEN’S DECISION-MAKING OVER PRODUCTION

Additional training for both male and female project participants on gender equality and women’s empowerment is often necessary to raise awareness of and reflect on personal gender biases, beliefs, and attitudes. This will help women and men to understand the role gender plays in their daily lives and work and to acquire the knowledge and skills necessary for advancing gender equality. Projects can deliver this training directly through their own staff or through local service providers.

GENDER SENSITIZATION EFFORTS AND INCREASING WOMEN’S DECISION-MAKING IN AGRICULTURAL PRODUCTION

Case studies and project experience suggests that gender sensitization efforts can be successful in increasing women’s decision-making authority over production and income. For example, both male and female farmers and community leaders in the Bill and Melinda Gates-funded Sunhara India program participated in gender training and various community events, fairs, and consultations that raise awareness about female farmers’ rights and opportunities and challenged norms that constrained women’s participation in markets. These trainings complemented the other market development activities, including skills training, market linkages, and farmer organization development. A gender impact assessment found that the female participants of these activities reported greater decision-making over production and control over income.

Source: Caro, Pangare, and Manfre, “A Gender Impact Assessment,” 2013

ILLUSTRATIVE ACTIVITIES

- Use project gender analysis (and additional research as needed) to lay out the role of women in the production and marketing process; how women access extension and advice to perform these roles; and some implications for the overall productivity of the household and the value chain as a whole. Use this to educate public and private service providers on their client base and to launch conversations about equity and efficacy of their outreach to both sexes.
- Build capacity of public and private service providers to carry out stand-alone gender sensitization training, and/or incorporate messages about gender equity and women’s empowerment into other technical trainings and events. This could include general topics such as gender sensitization as well as specific topics such as nutrition, human rights, and GBV prevention and response. For example, some organizations have used farmer field schools as a space to discuss GBV (Cabus 2013).
- Identify both female and male gender specialists and project-level support staff. Although male gender trainers may initially be perceived with disdain or mistrust on the part of other men, on balance they can serve as role models and may be better able to communicate and foster acceptance of new and alternative notions about gender.

- Recognize that achieving change in gender relations is a complex process that is likely to face difficulties and provoke resistance. Coordinate with other private and public sector actors, and build on the work that other initiatives have carried out.

INTERVENTION I.3: USE BEHAVIOR CHANGE COMMUNICATION TO PROMOTE WOMEN’S DECISION-MAKING OVER PRODUCTION

Both women and men have firmly held ideas about gender-related roles and responsibilities. Gender norms and beliefs may limit women’s decision-making power related to production, marketing, or profit management. Targeted messaging can change women’s and men’s attitudes about women’s abilities and their right to be part of agricultural decisions.

ENGAGING PROACTIVELY WITH MEN AND BOYS

Practitioners are encouraged to seek out ways to engage with male community members across all gender-related activities. There are several reasons for including men when addressing gender issues: Because men yield power over women in many contexts, it is necessary to work with them to change the conditions of women’s lives. Without support from their partners, women are burdened with most of the responsibility for household tasks and looking after children, on top of income-generation activities. Having men serve as advocates for gender equity and involved in awareness raising can bring more attention to the matter. Finally, excluding men from work on gender relations can provoke male hostility and retaliation.

Practitioners have traditionally engaged with men in the areas of reproductive health and gender-based violence. Increasingly, involving men in promoting women’s economic and political empowerment has also become best practice. Without the support of male family members, women will remain responsible for a myriad of household tasks, detracting from their ability to engage in livelihoods. If men remain the prime decision makers in the household and community, women will not have a voice on what crops are planted and how family resources are distributed. Activities that promote shared labor and joint decision-making can lead to both improved economic status and harmony in the household.

Source: Dover, “Development Trends,” 2014

ILLUSTRATIVE ACTIVITIES

- Communicate social and economic benefits of women’s economic participation to village chiefs, cooperative leaders, and other community members—both women and men. This can be done through formal and informal meetings, trainings, and events on special days such as International Women’s Day.
- Use success stories to broadly disseminate how shared decision-making between men and women—including elders and youth—in the household can impact economic security. Encourage men to act as advocates for women’s empowerment. Male and female community advocates are often willing to discuss these issues with their community members, on exposure visits to other communities, or on the radio.
- Promote positive models at key industry events or influential communication forums; leverage “positive deviants” to drive independent adoption of good practices by other service providers. This could involve

a project-sponsored promotional piece, or project help/encouragement in getting the head of a company or a local Ministry of Agriculture office to speak directly about their practices. A project may also offer support to help capture and synthesize the impact of these changes on business-, sector- or household-level performance to strengthen the business case to adopt good practices.

- Recruit male participants who have seen positive changes in their own households to serve as advocates for women’s empowerment and gender equity. Broadcast their experiences in community meetings and through other platforms such as dramas, radio, workshops, etc.
- Collaborate with and build on what other actors—especially the host government, community groups and civil society—are doing to change inequitable gender perceptions and behaviors. Also look at efforts by other international NGOs, the private sector, and other donor-funded projects.

DOMAIN 2: ACCESS TO PRODUCTIVE RESOURCES

This domain is defined as ownership, access to, and decision-making power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit.

The following indicators are used in the WEAI to measure access to productive resources: 1) ownership of assets; 2) purchase, sale, or transfer of assets; and 3) access to credit.

Interventions that could improve women’s access to productive resources may include:

- Improving women's access to and control over land
- Increasing women’s access to credit
- Implementing “smart subsidies” to jumpstart asset acquisition
- Improving women’s access to resources through market linkages
- Strengthening women’s access to information technologies

Ownership and control over key agricultural resources such as land, livestock, and agricultural tools, as well as financial resources such as credit, are necessary to be able to act on decisions made about agricultural production. Studies suggest there are substantial gaps between men’s and women’s ownership over important agricultural assets (Allendorf 2007; Oladele and Monkhei 2008; Doss, Deere, Oduro, and Suchitra 2012; Peterman, Behrman, and Quisumbing 2010). This section discusses interventions that could increase women’s ownership and control over agricultural resources.

INTERVENTION 2.1: IMPROVING WOMEN’S ACCESS TO AND CONTROL OVER LAND

Ownership and control over land is fundamental to agricultural production. Land security is often correlated with greater adoption of technologies, as ownership of the land allows farmers to feel more secure about investing in land improvement technologies to increase production (Doss and Morris 2001). Land can be used as collateral in order to gain access to credit for technological advancements or for other productive activities, and it often provides greater access to agricultural productivity related

RESOURCES ON WOMEN’S LAND RIGHTS
The Landesa Center for Women’s Land Rights champions women’s secure access to land by providing resources and training that connects policymakers, researchers, and practitioners around the world. They recently released women’s land right guides for three countries: Kenya, Tanzania, and Uganda. They also have a guide on *International Agreements and How to Build a Legal Case for Women’s Land Rights*. See also USAID’s Land Tenure portal, which has a section on gender issues.

groups, such as cooperatives and contract farming schemes. Ownership of land can also improve women's bargaining positions in the household (Doss 2001).⁹

Women's ownership and control over land worldwide is severely limited. Empirical evidence suggests national-level, gender-sensitive land titling interventions and land-use certificates can successfully increase women's land security (Holden, Deininger, and Ghebru 2011; Deininger, Holden, and Zevenbergen 2007; Ali, Deininger, and Goldstein 2014; Menon, Rogers, and Kennedy 2013; Field 2003). However, many agricultural market-systems development projects work at a regional level and often cannot directly influence the national agenda. Nonetheless, projects can raise an awareness of the economic and social advantages of allowing women to have long-term, secure access to land; build the capacity of national-level associations to advocate for women's inclusion; and link women to organizations and programs that support women's land rights, either as sole owners or jointly with other family members.

CASE STUDY: EASTERN PRODUCE KENYA OUTGROWER EMPOWERMENT PROJECT

A tea outgrower project in Kenya encouraged male project members to allocate some of their land to be used and controlled by wives, sisters, or daughters, who provided much of the labor in tea production. The land allocation allowed these women to join a producers' organization and benefit from its social services, productivity training, and extension services.

Source: Chan, "Improving Opportunities for Women," 2010

ILLUSTRATIVE ACTIVITIES

- For projects that are not able to influence policy directly, activities could include raising awareness of the importance of land ownership and larger land size for women to farm through formal events and informal networking; encouraging traditional leaders to allocate customary land equitably for women farmers and women's groups; promoting success stories to demonstrate impact on the community; and embedding targeted messages in agricultural capacity-building activities.
- Invite land rights groups to set up booths at trade fairs, demo plots, farmer fairs, or other project events to share information, answer questions, and point people toward available resources. Where relevant, raise awareness on how women can obtain joint ownership and the steps necessary to do so.
- Build the capacity of associations and other civil society organizations to advocate on issues related to access to and control over land, specifically to empower women to be able to lease land and negotiate for use of land. Raise awareness of the importance of intrahousehold decisions on access to and control of land and other resources.

⁹ Ownership of land can improve the bargaining position of women relative to men in the household. This affects outcomes such as how women use their time and what influence they have over agricultural and household resource decisions. For example, using a sex-desegregated household asset survey from Karnataka, India, the authors find that married women in rural Karnataka who own land or a house are more likely to be 1) able to travel alone to the market, a health facility, and other places outside the community; 2) make decisions alone about whether to be employed; and 3) make decisions alone about whether to access the health facility. The results are similar for women's greater share of the value of household's agricultural land and house, controlling for other factors (Swaminathan, Lahoti, Suchitra J.Y., 2012). As a second example, using panel data from the Ethiopian Rural Household Survey, Kumar and Quisumbing (2012) find that greater total land inherited or gifted to female household members increases the perception a married woman has in terms of control over her life.

- If the project has national-level activities and/or an advocacy component, it could conduct gender audits of relevant government/customary policies and procedures and engage with government departments for sensitization and changes at the policy level.

INTERVENTION 2.2: INCREASE WOMEN'S ACCESS TO CREDIT

Research suggests that gender differences in opportunities, access to resources, responsibilities, and roles—all which vary by culture and context—result in differences in how men and women invest and save (Fletschner, Anderson, and Cullen 2010). Female farmers are less likely than men to have the necessary collateral for credit. Additionally, female farmers may be less familiar with credit options and more apprehensive about taking on debt than men. This may impact their willingness to use credit to invest in their livelihoods and may make them less interested in taking out loans, even when credit is available to them. In those cases, women may have a stronger preference for financial products tailored to help them save in a secure environment, insure against risks, or borrow without risking losing their assets (Fletschner and Kenney 2011).

Increasingly, the development sector is looking to technology to increase access to credit. More studies are needed to understand how mobile banking impacts women. There are 110 active mobile banking systems around the world (Mehra, Patel, Shetty, and Golla 2012). However, using these types of interventions may unintentionally exclude women, given that 300 million fewer women than men worldwide own a cell phone (“Connecting Women” 2014).

Certain interventions may be better at ensuring women maintain control over their savings or the money they access through credit. Additionally, keep in mind that interventions that are combined with technical assistance are most likely to be effective (Holvoet 2005).¹⁰

ILLUSTRATIVE ACTIVITIES

- Promote and strengthen savings and loans groups, whose members are often predominantly female, with a focus on strengthening the viability of these groups; use them as entry points to connect women to formal financial institutions and market opportunities. Build on the collective models to access and advocate for other services and resources.
- Support financial literacy training through women's groups to improve money management skills and build confidence in savings organizations and other financial institutions. As women become more

ARE WOMEN MORE RISK AVERSE THAN MEN?

There is mixed understanding about whether women are more risk averse than men. A literature review suggests that women are not inherently more risk averse than men. It is, rather, that gender differences in opportunities, access to resources, differences in responsibilities and roles—all of which vary by culture and context—result in differences in how men and women invest and save. Therefore, rather than assume that women are more risk averse than men in all communities and contexts, implementers need to focus on providing financial services that address women's and men's needs based on their specific roles in their communities.

¹⁰ Evidence suggests that it is advantageous to combine training and skill development with credit. Compared to credit that is given without training, credit directed through women's groups and combined with financial educational training results in longer-lasting and greater decision-making around money management, loan use, and women's time use in the household.

skilled, introduce more sophisticated training, such as developing annual or seasonal cash-flow calendars based on real life cycles; safekeeping money; savings; planning; budgeting; prioritizing expenditures; etc.

- Proactively connect female producers and women's groups to formal credit opportunities. Do not assume that all women are resource and collateral poor. Set ambitious targets to increase women's access to finance, then seek out individual women and women's groups that have resources, viable business models, and experiences, and connect them to financial institutions, credit providers, and mobile banking opportunities.
- Work with financial institutions and other credit providers to expand their services to be more inclusive of female producers, such as developing or customizing financial products and services aimed at female entrepreneurs and women-led organizations and associations (individual female producers are likely to be looking for loans that are too small to be of interest to larger financial institutions) or sensitization training for financial institution leaders and loan officers to help them understand and respond to the unique needs of female borrowers.
- Work with civil society and local government departments that offer legally valid documents related to identity and status to make this documentation more easily accessible to women. While it may appear to be outside the scope of the typical market-oriented project, if the lack of identity cards is an obstacle for women to access credit, addressing that constraint can have a large impact.
- Analyze women's need for financial services to help them become better advocates for their own needs, rather than passive recipients of financial products someone else has developed. This would include learning where they currently access financing (self-help structures, suppliers, buyers, local lenders, family, group loans with shared guarantees, etc.); what life, family, or business activities they need to finance (often family needs, food, medical, school, weddings, funerals, etc., are the most pressing); and what types of financial products would best suit them, including savings accounts and insurance.
- Explore ICTs to increase women's access to financial products and information on the financial services and market opportunities available to them. This could include carefully designed subsidies for cell phone purchases and helping ICT companies develop different tiered calling plans. Make sure women are able to use the technology and that their level of literacy is such that they can receive and understand messages.
- Introduce asset-based storage financing based on crops (such as a warehouse receipt program) to provide female farmers with the chance to get access to credit.

INTERVENTION 2.3: IMPLEMENT “SMART SUBSIDIES” TO JUMP-START ASSET ACQUISITION

Projects aim to create sustainable linkages between value chain actors using a facilitation approach, but that is not always possible during the initial phases of the project. Smart subsidies—which can be in the form of financial or in-kind support—are a possible solution. Subsidies are considered “smart” in the context of facilitating market systems development if they “reinforce the development of beneficial commercial relationships by mimicking normal transactions and increasing the benefit of the transaction for one or both parties” (Norell and Brand 2012). They can provide poor female farmers access to starter assets that can be used to stimulate agricultural productivity, help women grow their businesses, and allow them to interact competitively with other market actors.

CASE STUDY: SMART SUBSIDIES IN GHANA

The Binaba Women Farmers’ Association, partner of the USAID Feed the Future program in Ghana, is based in a community where men have up to 10 wives, and women cannot count on their husbands to help clear the land. When the members of the group first met with project staff in 2011, they said that late land preparation was their biggest constraint. With 75 members, they needed four donkey ploughs and two carts, but were not able to provide the full 30 percent leverage to get these resources. The project proposed that if they could supply the bullocks, then that could be considered leverage. The women managed to convince the men in the community to donate two pairs and sold stored maize to purchase two more bullocks, enabling them to secure the grant for plows and carts. Now they are able to clear the land in time to plant, and as a result, have seen significant increases in yields. One woman said she used to worry about feeding her family, and now she can do that and pay school fees. Wisely, they are putting aside money for maintenance of the animals and ploughs. Their husbands and children currently take care of the bullocks, but they understand they need to learn how to do it themselves.

Source: Stern, Ghana ADVANCE Gender Impact Assessment, 2013

Asset transfers or grants need to be carefully considered. They should be suitably scaled and have an appropriate level of cost-share. Temporary or one-off interventions may be more acceptable in certain contexts. Finally, they need to distort the market as little as possible.

ILLUSTRATIVE ACTIVITIES

- Provide in-kind grants to poor farmers with flexible leverage requirements depending on the farmers’ needs. This could include requiring a smaller contribution, or allowing grant recipients to repay in kind rather than cash. Demonstrate flexibility and creativity in setting up agreements.
- If possible, channel the smart subsidies through financial institutions, buyers, or service providers to lay the groundwork for one-on-one interactions once the female beneficiaries become more viable clients.
- Set goals to target a certain percentage of female farmers.
- Link women to government-led social protection or assistance programs. This might include educating women on the availability of these programs, assisting them with registering, collaborating with the programs to include project beneficiaries, etc.

INTERVENTION 2.4: IMPROVING ACCESS TO RESOURCES THROUGH MARKET LINKAGES

Studies suggest there are substantial gaps between men's and women's ownership of important agricultural assets. In addition to land, a gender gap in the ownership of livestock and agricultural equipment exists in many countries. Market system approaches to improving access to agricultural resources include traders that provide cash advances ahead of harvest, agribusinesses operating contract farming or outgrower networks, and input providers that sell on credit. Projects that devise strategies to reach female farmers within these schemes could successfully increase women's access to important agriculture resources.

CASE STUDY: FACILITATING ACCESS TO IRRIGATION PUMPS THROUGH PRIVATE INPUT DEALERS

KickStart International's market development project worked through local private sector dealers to sell irrigation pumps to farmers in Kenya and Tanzania. The project has been promoting female farmers' uptake of pumps since the early 2000s through various outreach strategies, including female extension workers and sales representatives. While these efforts have improved smallholder farmers' well-being, it has not "led to gender-equitable ownership of pumps." Women are still only 10 percent of pump buyers in Kenya and Tanzania. These findings demonstrate how the importance of a strategy of multiple interconnected interventions is necessary to achieve changes in women's control over resources. Nonetheless, the study recognizes that even women's access to pumps owned by men can influence their bargaining power in the household. The study has recommendations for projects, including the importance of having strategies for addressing women's financial and information constraints and ensuring the technology meets women's physical needs.

Source: NJUKI et al., "Do Women Control What They Grow?" 2013

ILLUSTRATIVE ACTIVITIES

- Facilitate women's access to, and control of, inputs, tools, and other agricultural and processing equipment through the development of market linkages (see Intervention 3.1: Connect female farmers to markets) as well as through cooperatives, farmer groups, or other collectives (see Intervention 4.1: Strengthen women's groups and collectives).

INTERVENTION 2.5: STRENGTHEN ACCESS TO INFORMATION AND COMMUNICATION TECHNOLOGIES

Information and communication technologies (ICTs) provide farmers with information on weather, market prices, diseases, and pest outbreaks. Governments, private buyers, and donors use a variety of ICTs to provide access to advisory services to help farmers improve their farm practices, make informed decisions on what to grow, and find out how to address emergencies on their farms. ICTs offer opportunity for rapid (near real-time) and cost-effective dissemination of agricultural information to remote locations and diverse populations. However, practitioners do not always assess whether these technologies are accessible and whether the programs are useful to women.

ILLUSTRATIVE ACTIVITIES

- Determine where female farmers are currently obtaining information and what additional tools would be useful. Radio, television, mobile telephones, and internet are all popular among men and women in urban and rural areas, although their accessibility differs. Paying attention to how men and women gain access to information may provide insight on how ICTs can be utilized to more efficiently deliver agricultural messages.
- Partner with local radio stations to establish women's radio listenership clubs, where people gather at a venue to listen and then discuss the topic after the session. Build stations' capacity to program toward women and promote programming in local languages. Consider providing radios to women's groups and broadcasting for women at suitable times.
- Consider how information technology can be leveraged to overcome some access and control barriers, such as through support for SMS extension messages or call centers for agricultural advice. Consider using voice messaging, radio, and other methods to reach people who cannot read.
- Be sensitive to issues of women's access and control of mobile phones, and recognize that advice delivered through ICT may address some, but not all, extension needs. Recognize that if a household shares a mobile phone, some household members may have less access to it than others.

CASE STUDY: GENDER GAPS IN WOMEN'S AND MEN'S INFORMATION NETWORKS AND USE OF ICTS

While both male and female farmers' information channels are built on social networks, women's networks are often smaller than men's, so they offer fewer opportunities for learning about new productive and commercial opportunities. A case study that looked at the use of ICTs by women in Kenya found that their contacts tend to be closer to home and represent a smaller range of agricultural actors than those with whom men engage. Many women included their husbands in their information networks. However, if the message goes to the man in the household, there is no guarantee that it will be disseminated to other household members. While both men and women had access to mobile phones, radios, and televisions, services that combine personal contact with technology have been found to be the most successful.

Sources: Sebstad and Manfre, "Field Report No. 12," 2011; and Manfre and Nordehn, "Exploring the Promise," 2013

DOMAIN 3: CONTROL OVER USE OF INCOME

This domain is defined as an individual having sole or joint control over income and expenditures.

The following indicator is used in the WEAI to measure this domain: 1) control over use of income.

Interventions to address control over income and expenditures may include:

- Connecting female farmers to markets
- Creating opportunities for employment and off-farm businesses
- Supporting business education and market skills development
- Facilitate women's access to technologies or physical spaces where they can save their Income
- Use behavior change communication to promote more equitable decision making at the household level

Control over income and expenditures means an individual receives remuneration for her work and participates in the decisions around its expenditure. This section discusses interventions that could increase women's control over income.

CASE STUDY: THE LIMITATIONS OF MARKET LINKAGES ON IMPROVING WOMEN'S CONTROL OVER INCOME AND EXPENDITURES

The Strengthening the Dairy Value Chain Project in Bangladesh connected households with collection facilities to chill and test the quality of milk. The project emphasized women's participation and employment opportunities. The intervention aimed to reduce transaction and transportation costs by setting up in-village sales points, and it also aimed to improve the quality of the product. An impact study found that households increased the assets owned solely by men, as well as assets that were jointly owned by men and women. However, there was little impact on women's decision-making in dairy-related production, and no impact on women's decision-making around the use of income and expenditures.

Source: Quisumbing et al., "Can Dairy Value-Chain Projects Change Gender Norms," 2013

INTERVENTION 3.1: CONNECT FEMALE FARMERS TO MARKETS

The expansion and deepening of markets has extended links between formal and informal activities. Defining where formal markets end and informal markets begin is difficult. However, formal markets are generally more likely to have clear quality and regulatory standards. Formal market channels may include outgrower and contract farming arrangements, cooperatives, aggregation centers, franchises, and direct buyer arrangements. Informal markets may include unofficial transactions between farmers and sales from farmers directly to consumers. Informal markets are more common among medium- and small-scale farmers, and

given their weak access to resources and information, female farmers are even less likely than their male counterparts to be connected to more formal agricultural market channels (Quisumbing, Rubin, Manfre, Waithanji, Van Den Bold, Olney, Meinzen-Dick 2014). This limits their ability to move from subsistence agriculture to higher-value markets (“Gender in Agricultural Markets” 2009, p. 173).

ILLUSTRATIVE ACTIVITIES

- Carry out an assessment to determine the extent of the gender gap in access to markets, and use the findings to drive implementation. For example, if cooperatives are one of the primary market access channels, projects need to determine the proportion of women and men who are cooperative members, and if women are underrepresented, design activities around increasing membership and equitable access to benefits.
- Make a business case to private sector partners for why they should increase the proportion of their female suppliers (e.g., more suppliers means more supply, loyal suppliers, etc.). Host meetings or events where other private sector representatives explain the benefits they have seen in working with female suppliers to overcome stereotypes that female farmers cannot be productive or competitive with male farmers.
- Facilitate relationships between female farmers and buyers that ensure that women are more likely to be paid directly for their work instead of through their husbands. For example:
 - Link existing women’s groups—such as self-help groups, village savings and loans groups, and women’s producer groups—to formal buyers.
 - Link female farmers to larger lead or nucleus farmers and aggregators who have the capacity to invest in these chains. Establish linkages with other intermediaries in the value chain, such as processors or wholesale brokers, who can provide inputs and tools on credit either to a nucleus farmer, a collective, or to individual farmers, with repayment due upon sale of the agricultural products. These end-market representatives can take their commodity requirements and demand to the female farmer groups to better align production quality, quantity, and timing with market demand.
 - Facilitate outgrower and contract farming schemes in female farmers’ names. Female

CASE STUDIES: CONNECTING WOMEN’S GROUPS TO MARKETS

Connecting women to formal market opportunities by mobilizing them into collectives is a promising way to increase their incomes. In northern Tanzania, the USAID-funded Smallholders Horticultural Outgrowers Project established organizations that helped women come together and lease land from farmers. The project also helped them move collectively into the production of high-value vegetables. The project succeeded in substantially increasing the incomes of participating women and had a positive impact on increasing women’s membership.

Source: Ihucha, “Arusha Women Export Vegetables,” 2009

An Oxfam report cites three different cases of female-majority collectives in Ethiopia, Tanzania, and Mali where the members all reported greater incomes than women of similar circumstances who were not members of collectives. In Tanzania, this appeared to be a result of joint marketing as well as the existence of savings schemes within the collectives. However, the groups were primarily targeting informal markets. Benefits were limited due to poor linkages between the farmers’ cooperatives and secure and reliable markets and buyers. The report suggests developing marketing associations for women is necessary.

Source: Baden, “Women’s Collective Action,” 2013

farmers benefit from consistent market access and embedded services, such as information, training, and finance for inputs, while firms benefit from consistent quality and volume of supply and reduced transaction costs. Analyze examples where women outgrower schemes have succeeded in ensuring the buyers get the quality and quantity they need on time.

- Work with buyers to put in place provisions that ensure women are more likely to receive and control payment for their work. This could include:
 - Encouraging buyers, aggregators, and cooperatives to move away from using land ownership or status as household head as a requirement for suppliers or members; and
 - Putting in place policies and processes where contracts and payments are made in the name of the female supplier herself instead of her husband, or where they are made jointly.
- Require private sector project grant recipients to track and report on the percentage of their clients and suppliers who are male and female. Provide training for them on why this is important for understanding the different needs and preferences of their suppliers.
- For more activity suggestions, see "Improving Opportunities for Women in Smallholder-Based Supply Chains," by the Bill & Melinda Gates Foundation (Chan 2010).

INTERVENTION 3.2: CREATE OPPORTUNITIES FOR EMPLOYMENT AND OFF-FARM BUSINESSES

Although some global food security initiatives like Feed the Future often focus on a farming household's engagement in one or two crops only, most farming households are sustained through multiple streams of income. In fact, a study by IFPRI found that "nonfarm work accounts for between one-third and one-half of rural incomes in the developing world" (Haggblade, Hazell, and Reardon 2009). Leveraging and strengthening women's and men's income from a diversity of sources is important because of the seasonal nature of agriculture and because households are vulnerable to climatic shock, pests, changes in the market, and so on. Income diversification is a way for households to self-insure, particularly when diversification is in work outside of agriculture. In addition, some economists posit that an agriculture-based livelihood is not a viable option in the long term for many of the extremely poor, especially in land-resource-scarce countries, and that the multiplier effects of agriculture-led growth are not a sufficient "pull" to create income-generating activities at the scale needed (Snodgrass 2014).

This is especially true for female farmers, who are often responsible for expenses that sustain the household throughout the year, including food and school fees (Sebstad and Manfre 2011). Women are also more likely than men to be engaged in informal and low-wage work, such as working on neighboring farms during peak harvest periods, engaging in domestic help, trading small goods at local shops, and so on. Linking these women to higher-value and safe income-earning opportunities during the off-season and throughout the year can enable them to make recommended investments in agriculture and move a household closer to sustainability.

The most successful interventions will address the constraints (including time constraints), incentives, and opportunities faced by men and women in the household. These vary by location and the availability of public services such as roads and water; proximity to markets and the needs of individuals in the community; property ownership rights; seasonality of work; skill and education of individuals; cultural and social factors; and gender norms.

ILLUSTRATIVE ACTIVITIES

- Use the market or value chain analysis to identify possible income-generating opportunities as well as barriers for women. These could include service provision roles in different nodes of the value chain, such as management of storage facilities, input supply management, seed storage and breeding, extension services, and paravet services. Link participants to the necessary skills training, inputs, services, and networks. Do not over-saturate the market.
- Consider non-agriculture-related economic pursuits such as petty trading, handicrafts, food sales, etc. Conduct a market analysis to assess opportunities, saturation potential, and scalability. Although they may not contribute directly to the agriculture sector, working in such jobs will allow women to hold on to their savings and invest in their land during the agricultural season.
- Support private sector partners in improving the working conditions and rewards of their workers—both unpaid family workers as well as informal employees. Organizations such as Women in Informal Employment Globalizing and Organizing provide a variety of resources on how to do this.

GENDER DIFFERENCES IN PRODUCTION AND PROCESSING OF HIGH-VALUE EXPORTS

Women are heavily involved in the production and processing of high-value exports in many developing countries. In most of these industries, tasks are broken down in line with gender stereotypes. Women typically perform tasks requiring manual dexterity, while men's tasks require physical strength, supervisory capacity, and mechanical skills. Women's jobs tend to be linked to seasonal labor and offer little security. As temporary workers have few rights, women often face poor working conditions and insecure employment. In Kenya, the proportion of women in the export vegetable labor force engaged in flexible work is 63 percent, compared to 38 percent of their male peers. I.e., nearly two-thirds of men in this sector hold permanent positions, in contrast to just over one-third of women.

Source: Dolan and Sorby, "Gender and Employment," 2003

INTERVENTION 3.3: SUPPORT BUSINESS EDUCATION AND MARKET SKILLS TRAINING

Many project participants may lack the skills needed to run their farms like a business, and women may require more support than men because they are likely to have less education and less experience with formal markets or business environments. Implementers are cautioned not to rely solely on business training as a means to increase incomes: a meta-analysis of entrepreneurship programs found business training programs had mixed results and limited impact on business growth and increased incomes (Cho and Honorati 2013). However, studies suggest that business and market skills training can be successful when offered in conjunction with complementary interventions, such as access to finance and technical assistance (Bandiera, Burgess, Das, Gulesci, Rasul, and Sulaiman 2013).

ILLUSTRATIVE ACTIVITIES

- Assess the specific business environment, needs, and constraints faced by female entrepreneurs before implementing a business skill training program in order to ensure the curriculum is desirable, relevant, and targeted to the participants.

- Based on findings, determine if it will be more effective to carry out training with both sexes together, or to hold separate sessions for women. If together, make sure the material is relevant for women. Adapt training materials so that illiterate/innumerate people are still able to participate.
- If working through service providers, make sure they have the skills to understand the different issues faced by men and women and the tools to address them. Consider both traditional training sessions as well as coaching/mentoring to build capacity.
- Include a module on joint financial decision-making and encourage male and female household members to budget together.
- Link training programs to grants programs or access to credit activities.

SUBSISTENCE AND TRANSFORMATIONAL ENTREPRENEURS

A large number of female entrepreneurs targeted in developing countries are subsistence entrepreneurs, operating more out of lack of alternatives than any desire to become substantial businesswomen. It is important to differentiate between the following two types of entrepreneurs and design interventions that meet their needs:

- Subsistence entrepreneurs run micro-operations that do not grow into larger firms but merely provide an alternative employment opportunity to the entrepreneur and potentially their family members, though typically not for other workers in the economy.
- Transformational entrepreneurs build larger businesses that will achieve rapid growth if put in the right circumstances. Moreover, through their expansion process, they will create jobs for others.

Source: Schoar, "The Divide Between Subsistence and Transformational Entrepreneurship," 2010

INTERVENTION 3.4: PROMOTE TECHNOLOGIES OR PHYSICAL SPACES WHERE WOMEN CAN SAVE THEIR MONEY

There is a growing body of literature that emphasizes the importance of women having a safe space to save their income. A recent study in rural Kenya found that having a safe place to save money (such as a lock box) within the household increases women's savings (Dupas and Robinson 2013). The study looked at different savings interventions where individuals were provided a safe place to save money in rural Kenya. Changes in saving behavior were greater among married women than single women, which may suggest that having a safe place to save money within the household may be an important part of saving for married women for these communities. Mobile banking may also offer female farmers secure access to different financial services (Fletschner and Kenney 2014).

ILLUSTRATIVE ACTIVITIES

- Facilitate women's access to technologies that safeguard their income, such as prepaid cards to distribute loan payments or biometric smart cards that control who can have access to a savings account.
- Facilitate women's access to mobile phone plans where they can make loan payments and transfer cash.

- Encourage women to set up a safe place to save in the home, such as a locked safebox. This may be particularly important for married women.

INTERVENTION 3.5: USE BEHAVIOR CHANGE COMMUNICATION TO PROMOTE MORE EGALITARIAN DECISION-MAKING OVER HOUSEHOLD AND AGRICULTURAL EXPENDITURES

It is often necessary to take steps to ensure that women have a chance to benefit from the fruits of their labor. If women’s work contributes to increased household income, but that money is controlled by others in the household and spent in ways that do not benefit the household, then the intervention may have encouraged women to work harder for no benefit. Further, without control over income, there may be no incentive for female farmers to invest in increasing the productivity of their farms.

To address this, projects can complement the aforementioned interventions by also supporting local initiatives that promote shared and fair decision-making around important household and agricultural expenditures. In many cases, male family members can be convinced to give women more autonomy and influence once they understand the positive economic benefits to their households and their communities. It is important to keep in mind that many households do not pool their income, and if activities encourage members to reveal their earnings or savings, it could result in less control over income and how it is spent, particularly for women.

ILLUSTRATIVE ACTIVITIES

- Analyze intrahousehold relations to understand how household members share responsibilities and information and make decisions to ensure interventions are being appropriately targeted, are reaching the intended audience, and lead to more equitable sharing of responsibilities.
- Either as a standalone activity or embedded into other trainings, promote the concept of shared decision-making and household money management practices. There are various training curricula and participatory activities that implementers have used to do this, such as the Gender Action Learning System, Farming as a Family Business trainings done by ACIDI/VOCA and Lutheran World Relief, and the farming household action plans discussed in the text box.
- Ask men who share responsibility with their wives to act as advocates for improved

CASE STUDY: FARMING HOUSEHOLD ACTION PLANS IN ZAMBIA

Projects that directly address gender relations at the household level can lead to changes in roles and responsibilities. The Agricultural Support Program (ASP) in Zambia took into account women’s work loads and worked toward improving gender relations. The program aimed to both support increased food security and build entrepreneurial skills. The project helped farming households to develop household action plans. Activities included gender sensitization and a mapping of tasks, responsibilities, and decision-making. The end-line survey identified changed behaviors resulting from project implementation, including shared decision-making. Subsequent initiatives have been able to build off of this success and continue to promote positive interactions between men and women at the household and community levels.

Source: Tamvir and Safdar, “The Rural Woman’s Constraints,” 2013

gender relations. Promote success stories in-person, through media channels, and at community events. See interventions for domain five for more information on these types of activities.

DOMAIN 4: COMMUNITY LEADERSHIP

This domain is defined as membership in economic or social groups and comfort in speaking in public.

The following indicators are used in the WEAI to measure community leadership: 1) group membership; and 2) speaking in public.

Interventions to address women's greater participation in groups and leadership in the community may include:

- Increasing women's active participation in groups and collectives
- Developing women's ability to take on leadership roles
- Facilitate literacy/numeracy training

Participation in community groups and organizations increases access to information about the newest technologies in agriculture, latest market prices, and connections that may help increase production and marketability. Groups can also provide individuals financial support or credit for agricultural investments, as well as an important form of insurance or protection against loss in the event of crop damage or failure. This section discusses activities that could increase women's participation in groups and leadership positions within these groups.

THE PROS AND CONS OF WOMEN'S GROUPS

In some communities, single sex groups are most appropriate. In other communities, mixed groups may be more advantageous. However, even where mixed groups function well, women-only groups can provide women with safe spaces, not only for saving and accessing loans, but also for building strong solidarity around social, political, or economic issues. In a 2009 study, the World Bank found that vulnerable group members perceived that improving their self-esteem and increasing organizational skills to be the most important result of participation in groups, perhaps as or more important than the economic benefits of group action. Women's groups can be a place where women learn important leadership skills, such as overcoming fears around public speaking and being able to voice an opinion, which are skills that can be used other community arenas. Additionally, collective action in the form of women's groups can have positive effects in terms of individual economic outcomes as well as more generalized benefits. Data from northern India show that engagement in collective female empowerment programs has resulted in significant increases in female access to employment, physical mobility, and political participation. Yet, as previously discussed, women's groups tend to have less access to commercial networks and markets.

Source: Evans and Nambiar, "Collective Action and Women's Agency," 2013

INTERVENTION 4.1: INCREASE WOMEN'S ACTIVE PARTICIPATION IN GROUPS AND COLLECTIVES

Linking women to established, well-connected cooperatives or other collectives enables them to access a number of benefits, including inputs and other agricultural assets, storage facilities, and market linkages. It also gives them access to trainings on a variety of relevant topics from government, development, and private sector service providers. However, women are not always able to join groups, particularly the formal ones that offer a wider array of services, due to economic or social constraints. In fact, the literature on community-based groups suggests that women's participation typically decreases as groups become more formalized, while men's participation increases (“Gender in Agricultural Markets”2009).

Cooperative membership often requires access to resources. Most female smallholder farmers are not land owners, and this can prevent them from joining formal collectives. Cooperative procedures often discriminate against married women by only allowing heads of households or land-holders to become members (Baden 2013). Group activities can also be time consuming, making it harder for women to participate (Meinzen-Dick and Zwaarteveen 1998).

Market development projects can address these gender gaps by designing activities that encourage women to join and participate actively in collectives, (Quisumbing and Pandolfelli 2009)¹¹ at the same time working with the collectives to ensure they understand the benefits of women's membership and offer services and support that respond to women's needs (Oxfam 2013; Meier zu Selhaisen 2012; Westermann, Ashby, and Pretty 2005).¹² They can also work with buyers to put in place incentives for cooperatives to change their practices and achieve greater representation of women as members and leaders. Finally, they can strengthen female-majority or women-only groups by connecting them to stronger networks and better markets while providing support to ensure that women maintain control and leadership.

CASE STUDY: COOPERATIVE-LED GENDER POLICIES AND TRAININGS

In Nicaragua, there are at least 32 farmers' cooperatives that have adopted gender-equality policies. Some of these, like Prodocoop coffee cooperative, requires its members to go through gender training. The women are trained on self-esteem and the men are trained on positive masculinities. They also set aside a portion of their fair trade premium to fund these trainings and other gender equality initiatives.

Sources: Interview with Alexa Marin, head of the PRODOCOOP gender committee, Jan 13, 2015. See also Bach, “Women in Nicaragua” 2015.

ILLUSTRATIVE ACTIVITIES

- Assess and understand the barriers to women's participation. This may include the need for childcare, transportation, or escorts who are trusted by the women's family members.

¹¹ Women need to know how they will benefit from participation in groups. A project in the Philippines, for example, tried to engage women in monitoring lake water to determine whether soil conservation techniques were reducing silting. This required a time and labor commitment the women were initially not willing to make. Once the project staff realized that women's primary interests were around health issues, they showed them how their efforts could impact the health of their families, and women's participation significantly increased.

¹² Research shows that collaboration, solidarity, and conflict resolution all increase in groups where women are present (including women-only groups). Additionally, people are more likely to return benefits for benefits in women's and mixed groups. Studies also show that the capacity for self-sustaining collective action increased with women's presence and was significantly higher in groups involving women.

- Assist cooperatives in setting targets for women’s membership and leadership and developing a gender policy or strategy. Encourage them to set aside budget to implement the gender policy and strategy.
- Support committees within cooperatives to be spaces for women to become leaders and advocate to the board of directors and general assembly to adopt more gender-responsive policies, budgets, and activities. Use committees as spaces to conduct leadership training and training of trainers on gender so that they can educate and train both male and female cooperative members on the benefits of female membership and leadership, as well as other gender topics, such as shared household decision-making.
- Support outreach to potential female group members and make sure women are informed about trainings and other learning opportunities; ensure that they are held at convenient times and locations and that they provide necessary assistance for women to participate, including child or elder care and travel reimbursement.
- Identify women-led or women-only groups and focus on strengthening them, formalizing them, and connecting them to formal markets and service providers within the value chain.
- Link groups to other civil society or government services as necessary to address other social, health, and safety concerns that are often a top priority of women’s groups, such as literacy, family planning services, human rights training and GBV prevention, mitigation, and adjudication services.
- Review services offered by the group or collectives to assess whether they meet the needs of both male and female members. For example, if the cooperative set up a group-based savings and loan service, then it might see increases in female participation. Design capacity-building plans around identified gaps. Set up systems to track satisfaction with the collective.
- Put in place mechanisms that enable women to join groups and remain active members:
 - Allow non-household heads and non-landowners to be group members;
 - Time meetings to accommodate women’s schedules and workloads;
 - Build capacity of leaders to solicit women’s opinions and questions in meetings and trainings; and
 - Allow the groups to also host other activities that are of interest to women as a way to attract members.

INTERVENTION 4.2: DEVELOP WOMEN’S CAPABILITIES TO TAKE ON LEADERSHIP ROLES

While implementers may want to encourage women to express their needs openly, women may be accustomed to letting men take the lead in some situations, making it difficult to elicit female participation in project activities. Even when women join groups and organizations, they are often underrepresented in the organizations’ leadership. Projects can address this by building women’s capacity to lead and be heard and by creating situations where they can put learning into practice. They can also use training and behavior change communication to build a supportive environment for women to take on and succeed in leadership roles.¹⁵

¹⁵ Women who take on leadership roles around livelihoods can go on to challenge gender norms in the wider community, whether together or as individuals (Evans and Nambiar 2013). A series of case studies by Oxfam on the effect of group participation on women’s leadership found that participation in these cooperatives has increased members’ self-confidence and leadership skills. Further, members claim they have a greater decision-making ability as a result of new knowledge gained (Baden, 2013).

ILLUSTRATIVE ACTIVITIES

- Incentivize cooperatives to set and report on targets for women’s leadership. This can be done through the grant agreement between the cooperative and the implementing organization or through incentives from buyers who source from the cooperative. For example, cooperatives could receive certain premiums based on the percentage of women in leadership positions.
- Support female members of cooperatives and gender committees in conducting awareness campaigns on the benefits of having women in decision-making positions. Ensure that leadership is as inclusive as possible, with diversity in social factors such as tribe, religion, and social status.
- Conduct skills and leadership training for women at different levels of the value chain: in producer/marketing groups, associations, business managers, etc. (either with men or separately, depending on what will be most effective in the targeted country). Build in follow-up visits or training to address any challenges.
- While not all women are ready to become leaders, trainings that build women’s confidence and make them feel comfortable speaking and negotiating might be useful. This training can be stand-alone or embedded in other capacity-building sessions. Enhance the skills of interested women to run for boards of directors in associations or cooperatives.

ROLE MODELS AND MENTORS

“Networking and mentoring have also been found to be critical in motivating women entrepreneurs to lead crossover enterprises, that is, firms operating in more productive, male-dominated sectors. Campos et al. (2013) investigate the attributes of women who successfully cross over in Uganda. While human capital does not appear to be a significant determinant, access to a role model, in addition to initial capital, is a critical determinant of crossovers. Women who had male role models were between 55 and 74 percent more likely to cross over into higher-productivity sectors than women who had no such access. Fifty-four percent interacted with other business owners at least once a month, while only 39 percent of non-crossovers did. These results stress the importance of including in support programs regular productive interactions with role models and inductions into industry networks, while also providing access to finance to reduce the gap in initial capital.”

Source: Cirera and Qasim, “Supporting Growth-Oriented Women Entrepreneurs,” 2014

- Create mentoring opportunities for women who are interested in leadership development.
- Seek out civil society organizations in the country or region that provide leadership training—either for women, or both women and men—and leverage their expertise.
- Encourage women to participate in other social and political assemblies at the village level and raise their concerns.
- Most rural women have not had any exposure to successful businesswomen or female lead farmers. Giving them the opportunity to observe and engage with other women and to share challenges and successes can be helpful and inspiring. Having a support network that can provide advice and contacts can help them participate more effectively, not just in production, where we see the majority of women, but in higher levels of the value chains. Projects can link with programs like AWARD (African Women in

Research and Development) that require participants to do community outreach to other women.¹⁴ Also consider male mentors.

- Take women on exposure visits to places where they see their peers playing leadership roles in order to raise their aspirations and confidence. This could include trade fairs, farm visits, and other networking events. Ensure participants have the skills and tools needed to participate effectively in these events. Exposure visits can serve several purposes: to introduce project beneficiaries to value chain stakeholders with whom they may do business and to teach best practices. For women, it can also give them a chance to observe successful women in action.
- Create opportunities for women to speak in public at conferences and fairs, or at events held for International Women’s Day or other such occasions.
- Promote success stories through presentations and use of media.

INTERVENTION 4.3: FACILITATE LITERACY AND NUMERACY TRAINING

In many of the countries targeted by Feed the Future, girls leave school earlier than boys. While gender parity in primary education has become common in most regions, it is less common at the secondary level (“Boys and Girls in the Lifecycle” 2011). As a result, many women, especially older women, are at least partly illiterate and innumerate. This can present a number of challenges. Work-related challenges include being unable to read instructions, negotiate effectively, or read messages on weather or markets; personal challenges include being unable to help children with homework, identify seat numbers on buses, or read prescriptions and instructions for medications. For female farmers, lack of literacy or numeracy is especially challenging, as fertilizers and other agricultural inputs often require some ability to either read (e.g., instructions for use) or calculate (e.g., the amount of fertilizer to use). Basic numeracy can be taught in a relatively short time and can have a significant impact on a woman’s life.

While women are almost always less literate and numerate than men, rural education levels for men are also low. This is another instance where a project may need to address literacy as an overall poverty-reduction strategy, targeting both men and women, but being careful to ensure women benefit equally from the activity.

ILLUSTRATIVE ACTIVITIES

- Integrate functional literacy and/or numeracy training into market development programs, or as part of farmer training or extension service projects.

¹⁴ See www.awardfellowships.org/

- If implementers do not have experience in this area, facilitate literacy/numeracy training through a grant to a local organization with experience in this area. Identify government or donor programs providing such training and link project beneficiaries to them.

EVIDENCE ON THE CONNECTION BETWEEN LITERACY AND ECONOMIC EMPOWERMENT

A DFID review of evaluations and research across 30 countries supports the concept that supporting literacy programs can improve skills, productivity, and income. It also claims that when literacy is integrated into skill-training programs (such as agricultural productivity), 20 to 30 percent of learners upgrade their productivity. Additional findings show that “60 to 70 percent of participants in literacy classes, particularly mothers and female caretakers, are more likely to send and keep their children in school as well as monitor their progress; 30 to 40 percent of women in literacy education develop greater confidence in helping to make family decisions and in participating in local public affairs; 20 to 30 percent of participants show increased likelihood of improving the health and nutritional practices of their families; and 30 to 40 percent of participants in literacy education develop a stronger awareness of the need to protect the environment and a willingness to take action for it” (Source: “*Adult Literacy: An Update*,” DFID 2008). A review of literacy programs in four African countries found that people who had participated in literacy programs had increased confidence, were greater risk takers when it came to developing their livelihoods, and felt they were less likely to be easily cheated when buying or selling in the market. The review also found that livelihood program beneficiaries were motivated to learn as they were able to see the impact of their work.

Source: Oxenham et al., “Skills and Literacy,” 2002.

DOMAIN 5: TIME ALLOCATION

This domain is defined as the allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities

The following indicators are used in the WEAI to measure time allocation: 1) workload; and 2) time available for leisure activities.

Interventions to increase women's control over their time may include:

- Increasing access to time- and labor-saving devices
- Using behavior change communication to increase men's share of household and caretaking-related work

Women in developing countries are primarily responsible for caring for the household. This can include caring for children, the sick, and the elderly; collecting fuel and water; cooking; cleaning; and growing and harvesting subsistence food. On average, women in rural sub-Saharan Africa spend between 0.9 and 2.2 hours per day transporting water and firewood; they travel, on average, between 1 and 5 km per day on foot for 2.5 hours, while carrying a load of about 20 kg (Blackden and Wodon 2006). The bulk of care work is carried out by women with no remuneration and is rarely accounted for in national accounts. This care and household work limits women's earning opportunities. While men also carry out some care work, women are responsible for the majority of it, taking away from the time they can spend on paid work. On average, the majority of women's work worldwide is unpaid whereas the opposite tends to be true for men (Falth and Blackden 2009).

This domain is perhaps the least understood and researched, especially when it comes to understanding which interventions give women greatest control over their own time; a fairer allocation of remunerative vs. domestic tasks; and satisfaction with the amount of time available for leisure activities. Improved public infrastructure is a critical element for reducing the amount of time that household members—usually women—spend on domestic tasks. Since many agricultural market systems projects do not work on public infrastructure, it is not addressed in depth here. However, the gender analysis should identify these types of constraints nonetheless.

This section discusses interventions to improve access to technologies that will reduce women's workload. It also addresses behavior change communication to encourage changes in gender norms that dictate household tasks as being primarily the domain of women and girls and not men and boys.

Since work time consists of both paid and unpaid labor, another way to reduce overall work time is to obtain good compensation for paid work. The more a farmer earns per unit of time, they less she needs to work to secure a living. Increasing the value added to women's agricultural work through greater productivity is not addressed in this section, but it is addressed in the previous sections: In domain 1 it is addressed in the discussion of improved access to extension services; in domain 2 in the discussion of greater access to improved technological inputs; in domain 3 in the discussion of securing a decent income in agricultural and nonagricultural activities and by improving links between female farmers and market opportunities; and in domain 4 in the discussion of using groups to connect women farmers to buyers and services along the value chain.

INTERVENTION 5.1: INCREASE ACCESS TO TIME- AND LABOR- SAVING TECHNOLOGIES

Technologies can have a significant impact on reducing women’s work in both productive and domestic tasks. Yet some researchers have suggested that women adopt labor-saving technologies more slowly than men. Three reasons are commonly cited for this gender difference: 1) cultural appropriateness; 2) physical accessibility; and 3) affordability. It is also key that the technology meets women’s needs (Rathgeber 2011). New technologies can also add more work to a schedule that is already overburdened. A CGIAR review of several case studies provides some critical lessons learned (see text box).

FEMALE TECHNOLOGY ADOPTION: WHAT WORKS?

A paper published by the Consultative Group on International Agricultural Research (CGIAR) reviews technological innovation in agriculture approaches and the extent to which women have benefited or have been impacted negatively. It offers the following key lessons:

- The indirect impact of proposed technologies should be evaluated separately for different categories of women: landless women, landed women, wage earners, and food producers.
- Women should be involved in all phases of the project cycle and their recommendations incorporated in technology development.
- An effective productivity-enhancing, drudgery-relief strategy will develop labor-saving technologies for women in areas of low returns—especially the production and processing of major staples (maize, rice), especially where women do not control the products—so they can devote time to activities with higher returns.
- It is critical to understand the differential access to and control of resources within the household in order to consider these limitations and build in safeguards to protect and enhance women's assets and spheres of control when introducing new technology.
- The technology development process needs to take into account women's lack of access to land and resources to intensify agriculture (e.g., cash, fertilizer, or manure) and to design technologies where these limitations are taken into consideration.
- When considering new technologies, pre- and post-harvest activities (including agroprocessing, marketing, and consumption) need to be considered together, because women allocate their time and other resources to activities from production to consumption.
- Technology should be developed in conjunction with alternative employment- and income-generating opportunities such as the formation of groups to own and commercially operate the technology.

Source: Kaaria and Ashby, "An Approach to Technological Innovation," 2000

ILLUSTRATIVE ACTIVITIES

- Through a demand-driven approach, identify production and post-harvest technologies that meet women’s needs and preferences, which usually means that they are time saving, less physically demanding, and affordable. Through partnerships with public and private sector entities, encourage research and development of suitable technologies. Showcase these new technologies through lead farmers, demonstrations on market day, demonstration plots, etc.

- Also consider technologies that will decrease time and effort spent on household-related tasks, such as gathering wood and water. For example, fuel-efficient stoves reduce time spent transporting wood (and decrease damage to lungs through smoke inhalation).
- Encourage the design of, access to, and adoption of time- and labor-saving devices through credit or grants. If possible, promote local construction of the tools as an alternative livelihood.
- Build the capacity of female entrepreneurs and women’s groups to produce new technologies locally, in order to drive local employment and keep costs down.

CASE STUDY: TECHNOLOGIES DESIGNED BY FEMALE FARMERS FOR FEMALE FARMERS

A USAID-funded project implemented by Land O’Lakes International Development and the Massachusetts Institute for Technology Development Lab offers design training to female farmers’ groups in southern Tanzania. The members then developed prototypes of technologies that will help them do their work more efficiently, using locally sourced materials. Technologies included a palm oil extracting machine, a peanut sheller, a rice thresher, and a rice winnower.

Source: Aris, “Want to empower women in agriculture?” 2014

- Develop a channel for women to feed needs and feedback to research institutions. Work with research institutions to make sure training materials and demonstrations are suitable for and accessible to women. Ensure that the technology development process encourages women’s full participation, and that it is complemented with training in equipment operation, maintenance, and basic management skills.

INTERVENTION 5.2: USE BEHAVIOR CHANGE COMMUNICATION TO INCREASE MEN’S SHARE OF HOUSEHOLD AND CARETAKING-RELATED WORK

Behavior change communication and gender training interventions have been discussed in depth in this guide under domain 1 and domain 3. Many of these efforts can also include messages about the importance of sharing household tasks and caretaking work. The health and nutrition sector has made positive advances in encouraging men’s involvement in caring for children and vulnerable members of the household, including pregnant and lactating women. One important lesson from this work was that the health interventions that were most successful at involving men in maternal and child health were those that also addressed men’s health concerns (Greene 2004).

ILLUSTRATIVE ACTIVITIES

- Conduct the Gender Balance Tree (Mayoux 2015) exercise with men and women from the same households. This exercise enables participants to see gender gaps and imbalances in the work performed by women, girls, men, and boys within the same household. The exercise can be done as part of other gender training programs or during participatory community assessments. To make it facilitative, conduct the training in a cascading “training-of-trainers” style with local organizations, women’s groups, gender committees in cooperatives, extension agents, or universities.

- Promote positive images of men as fathers through a multipronged behavior change communication effort. This activity is especially relevant to agricultural market systems projects that also have a strong health or nutrition focus. Publicly supported fatherhood preparation trainings and information campaigns focusing on men’s roles in the lives of children can reach fathers who are unprepared or ill-informed about caring for children, and help them understand how they themselves benefit from greater participation in family life. Some of these activities could include:
 - Engaging with community leaders and sensitizing them on the important role of fathers in childcare and nutrition
 - Running campaigns and promotional events on the role of fathers in the health of the family
 - Forming father groups. If the project is forming mother care groups, they can also form father care groups. Men have their own set of problems and biases in the area of reproductive health and childcare but are rarely asked about them. Providing spaces for men to articulate their own problems could actually lead to greater openness and sensitivity to women’s problems.
 - Working with men as health promoters. If the project is also working in the health sector, it should identify men to act as health promoters. This may go a long way toward overcoming the stereotype of family health primarily being the concern of women.
 - Conducting school campaigns where children write essays or make drawings about their fathers and then share the outcomes with the fathers’ groups or men in a community celebration.
- See other illustrative activities under Intervention 1.3 and Intervention 3.5

REFERENCES

- “Adult Literacy: An Update.” 2008. DFID Practice Paper, Department for International Development: www.dvv-international.de/files/dfidbriefliteracyfinal080811.pdf
- Ali, Daniel Ayalew, Klaus Deininger, and Markus Goldstein. 2014. "Environmental and Gender Impacts of Land Tenure Regularization in Africa: Pilot Evidence from Rwanda." *Journal of Development Economics* 110 (September): 262–275: <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5765>
- Allendorf, Keera. 2007. "Do Women’s Land Rights Promote Empowerment and Child Health in Nepal?" *World Development* 35, no. 11: 1975-1988.
- Aris Giselle. 2014. “Want to empower women in agriculture? Use technology.” USAID Impact Blog (March 6): blog.usaid.gov/2014/03/want-to-empower-women-in-agriculture-use-technology/
- Bach, Oliver. 2014. “Women in Nicaragua Combat Country’s Macho Culture.” *The Guardian* (December 30): www.theguardian.com/global-development/2014/dec/30/nicaragua-female-farmers-agriculture-macho-culture
- Baden, Sally. 2014. “Collective Action, Gender Relations and Social Inclusion in African Agricultural Markets.” *Future Agricultures Policy Brief* 64 (February): <http://www.future-agricultures.org/policy-engagement/policy-briefs/1836-collective-action-gender-relations-and-social-inclusion-in-african-agricultural-markets/file>
- Baden, Sally. 2013. “Women’s Collective Action: Unlocking the Potential of Agricultural Markets.” *Oxfam Research Reports*. Oxfam International.
- Bandiera, Oriana, Robin Burgess, Narayan Das, Selim Gulesci, Imran Rasul, and Munshi Sulaiman. 2013. “Can Basic Entrepreneurship Transform the Economic Lives of the Poor?” *International Growth Centre* (April): theigc.org/wp-content/uploads/2014/09/Bandiera-Et-Al-2013-Working-Paper.pdf
- Blackden, C. Mark and Quentin Wodon. 2006. *Gender, Time Use, and Poverty in Sub-Saharan Africa*. Washington, DC: World Bank Publications.
- “Boys and Girls in the Lifecycle.” 2011. Statistics and Monitoring Section, Division of Policy and Practice, UNICEF: www.unicef.org/lac/boys_and_girls_life_cycle.pdf
- Budak, D.B., N. Darcan, and M. Kantar. 2005. "Women Farmers and Extension Services in Small Ruminant Production in Mountain Areas of Turkey." *Journal of Arid Environments* 62, no. 3: 507-515.
- Cabus, Sylvia. 2013. “Farmer Field Schools: A Safe Place to Discuss Gender-Based Violence.” USAID Impact Blog (December 4): blog.usaid.gov/2013/12/farmer-field-schools-a-safe-place-to-discuss-gender-based-violence/
- Campbell, Ruth. 2014. “A Framework for Inclusive Market Systems Development.” USAID: [www.acdivoca.org/site/Lookup/LEO-Market-Systems-Framework/\\$file/LEO-Market-Systems-Framework.pdf](http://www.acdivoca.org/site/Lookup/LEO-Market-Systems-Framework/$file/LEO-Market-Systems-Framework.pdf)

- Caro, Deborah, Vasudha Pangare, and Cristina Manfre. 2013. "A Gender Impact Assessment of the ASI Sunhara India Project." [www.acdivoca.org/site/Lookup/ASI-Gender-Impact-Assessment-of-Sunhara-India-Project/\\$file/ASI-Gender-Impact-Assessment-of-Sunhara-India-Project.pdf](http://www.acdivoca.org/site/Lookup/ASI-Gender-Impact-Assessment-of-Sunhara-India-Project/$file/ASI-Gender-Impact-Assessment-of-Sunhara-India-Project.pdf)
- Chan, Man-Kwun. 2010. "Improving Opportunities for Women in Smallholder-Based Supply Chains." Bill & Melinda Gates Foundation: <https://docs.gatesfoundation.org/Documents/gender-value-chain-guide.pdf>.
- Cho, Yoonyoung and Maddalena Honorati. 2013. "Entrepreneurship Programs in Developing Countries: A Meta Regression Analysis." The World Bank Policy Research Working Paper 6402 (April): <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6402>.
- Cirera, Xavier and Qursum Qasim. 2014. "Supporting Growth-Oriented Women Entrepreneurs: A Review of the Evidence and Key Challenges." World Bank Group. Innovation, Technology & Entrepreneurship Policy Note no. 5 (September): <http://documents.worldbank.org/curated/en/2014/09/20344837/supporting-growth-oriented-women-entrepreneurs-review-evidence-key-challenges>.
- "Connected Women - How Mobile Can Support Women's Economic and Social Empowerment." 2014. Vodaphone Foundation: http://www.vodafone.com/content/dam/connectedwomen/pdf/VF_WomensReport_V12%20Final.pdf
- Croppenstedt, Andre, Markus Goldstein, and Nina Rosas. 2013. "Inefficiencies, Segregation, and Low Productivity Traps." The World Bank Development Economics Vice Presidency Partnerships, Capacity Building Unit, Policy Research Working Paper 6370: <https://openknowledge.worldbank.org/bitstream/handle/10986/13171/wps6370.pdf?sequence=1>.
- Davies, Imogen. 2013. "Women's Collective Action in the Shea Sector in Mali." edited by Sally Baden. Oxfam International: <http://policy-practice.oxfam.org.uk/publications/womens-collective-action-in-the-shea-sector-in-mali-275772>.
- Deininger, Ali, Holden, and Zevenbergen. 2007. "Rural land certification in Ethiopia: Process, initial impact, and implications for other African Countries." World Bank Policy Research Working Paper 4218 (April): <https://openknowledge.worldbank.org/bitstream/handle/10986/7065/wps4218.pdf?sequence=1>.
- Dolan, Catherine and Kristina Sorby. 2003. "Gender and Employment in High-Value Agriculture Industries." The World Bank, Agriculture and Rural Development Working Paper 7 (May): http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/08/08/000094946_03072604085021/Rendered/PDF/multi0page.pdf.
- Dolan, Catherine and Kirsty Sutherland. 2002. "Gender and Employment in the Kenya Horticulture Value Chain." Globalisation and Poverty Working Paper. Overseas Development Group, University of East Anglia, Norwich, UK.
- Doss, Cheryl. 2001. "Designing Agricultural Technology for African Women Farmers: Lessons from 25 Years of Experience." World Development 29: 2075-2092.

- Doss, Cheryl, Carmen Diana Deere, Abena D. Oduro, and J.Y. Suchitra. 2012. "The Rural Gender Asset and Wealth Gaps: Evidence from Ghana, Ecuador, Uganda and Karnataka, India." Indian Institute of Management Bangalore.
- Doss, Cheryl and Michael L. Morris. 2001. "How does gender affect the adoption of agricultural innovations? The case of improved maize technology in Ghana." *Agricultural Economics* 25, no. 1: 27-39.
- Dover, P. 2014. "Development Trends: Increasing Engagement of Men and Boys for Gender Equality," Swedish International Development Cooperation Agency:
<http://www.sida.se/contentassets/b2ea921b1fc84ae59acc7c9db0841c85/298ca7c9-b106-4da0-814c-b25ad193a582.pdf>.
- Due, Jean M., Flavianus Magayane, and Anna A. Temu. 1997. "Gender Again—Views of Female Agricultural Extension Officers by Smallholder Farmers in Tanzania." *World Development* 25): 713-725.
- Dupas, Pascaline and Jonathan Robinson. 2013. "Why don't the Poor Save More? Evidence From health Savings Experiments" *American Economic Review* 103(4): 1138–1171.
- Evans, Alison and Divya Nambiar. 2013. "Collective Action and Women's Agency," *Women's Voice, Agency, & Participation Research Series, No 4.* The World Bank:
<http://www.worldbank.org/content/dam/Worldbank/document/Gender/Evans%20and%20Nambiar%202013.%20Collective%20action%20and%20women's%20agency.%20Dec%202017.pdf>.
- Falsh, Anna and Mark Blackden. 2009. "Policy Brief Gender Equality and Poverty Reduction: Unpaid Care Work." United Nations Development Programme:
http://issuu.com/undp/docs/ge_and_unpaid_care_work.
- Field, Erica. 2007. "Entitled to Work: Urban Property Rights and Labor Supply in Peru." *The Quarterly Journal of Economics*: 1561-1602.
- Fleck, Susan. 2001. "A Gender Perspective on Maquila Employment and Wages." *The Economics of Gender in Mexico*, edited by E. Katz and M. Correia. World Bank.
- Fletschner, Diana, C. Leigh Anderson, and Alison Cullen. 2010. "Are Women as Likely to Take Risks and Compete? Behavioral Findings from Central Vietnam." International Fund for Agricultural Development and the University of Washington:
evans.uw.edu/sites/default/files/public/Are_Women_as_Likely_to_Take_Risks.pdf.
- Fletschner, Diana and Lisa Kenney. 2011. "Rural Women's Access to Financial Services: Credit, Savings, and Insurance," *ESA Working Paper 11-07, Agriculture Development Economics Division, FAO*:
<http://www.fao.org/3/a-am312e.pdf>.
- Food Security and Nutrition Network Social and Behavioral Change Task Force. 2013. *Designing for Behavior Change For Agriculture, Natural Resource Management, Health and Nutrition.* Washington, DC: Technical and Operational Performance Support (TOPS) Program.
www.coregroup.org/resources/384-designing-for-behavior-change-for-agriculture-natural-resource-management-health-and-nutrition
- "Gender and Agricultural Markets." 2009. *Gender in Agriculture Sourcebook.* World Bank, Food and Agriculture Organization, and International Fund for Agricultural Development. World Bank Publications:
siteresources.worldbank.org/INTGENAGRLIVSOUBOOK/Resources/CompleteBook.pdf.

- Gilbert, Robert. A., Webster D. Sakala, and Todd D. Benson. 2013. "Gender Analysis of a Nationwide Cropping System Trial Survey in Malawi." *African Studies Quarterly* 6, nos. 1 & 2.
- Greene, Margaret E. Manisha Mehta, Julie Pulerwitz, Deirdre Wulf, Akinrinola Bankole, and Susheela Singh. 2004. "Involving Men in Reproductive Health: Contributions to Development." UN Millennium Project. http://www.unmillenniumproject.org/documents/Greene_et_al-final.pdf
- Haggblade, Steven, Peter B. R. Hazell, and Thomas Reardon. 2009. "Transforming the Rural Nonfarm Economy- Opportunities and Threats in the Developing World." IFPRI Issue Brief 58: http://www.ifpri.org/sites/default/files/publications/transforming_the_rural_nonfarm_economy_opportunities_and_threats_in_the_developing_world.pdf.
- Hillesland, Marya. "Causal Mapping of the Gender Integration Framework." Working paper submitted to USAID, publication forthcoming.
- Holden, Stein T., Klaus Deininger, and Hosaena Ghebru. 2011. "Tenure Insecurity, Gender, Low-Cost Land Certification and Land Rental Market Participation in Ethiopia." *The Journal of Development Studies* 47: 31-47.
- Holvoet, Nathalie. 2005. "The Impact of Microfinance on Decision-Making Agency: Evidence from South India." *Development and Change* 36: 75-102.
- Ihucha, Adam. 2009. "Arusha women export vegetables to European markets.": www.ippmedia.com/frontend/index.php?l=3315
- Kaaria, Susan K. and Jacqueline A. Ashby. 2000. "An Approach to Technological Innovation that Benefits Rural Women: The Resource-to-Consumption System." CGIAR Working Document No. 13 (July).
- King, Sally. 2013. "Women's Collective Action in the Honey Sector in Ethiopia." edited by Imogen Davies and Sally Baden. Oxfam International: <http://policy-practice.oxfam.org.uk/publications/womens-collective-action-in-the-honey-sector-in-ethiopia-275773>
- Kumar, Neha, and Agnes Quisumbing. 2012. "Inheritance Practices and Gender Differences in Poverty and Well-Being in Rural Ethiopia." *Development Policy Review* 30: 573-595.
- K4Health Website. Social and Behavior Change Technical Reference Materials Overview. <https://www.k4health.org/toolkits/sbc-trm/overview> Accessed March 2015.
- Madhvani, Sonia and Eija Pehu. 2010. "Gender and Governance in Agricultural Extension Services: Insights from India, Ghana, and Ethiopia." World Bank.
- Manfre, Cristina. "Extending The Benefits: Gender Equitable, ICT-Enabled Agricultural Development." Module 4 of "Overview Of ICT In Agriculture: Opportunities, Access, And Cross-Cutting Themes." Cultural Practice, LLC.
- Manfre, Cristina, Caitlin Nordehn. 2013. "Exploring the Promise of Information and Communication Technologies for Women Farmers in Kenya." Cultural Practice, LLC, MEAS Case Study no. 4: <http://agrilinks.org/library/meas-case-study-4-exploring-promise-information-and-communication-technologies-women-farmers>

- Markel, Erin and Lindsey Jones. 2014. "Women's Economic Empowerment: Pushing the Frontiers of Inclusive Market Development." USAID: www.microlinks.org/library/womens-economic-empowerment-pushing-frontiers-inclusive-market-development
- Mayoux, Linda. Gender Action Learning System (GALS) Tool 3: Gender Balance Tree. www.galsatscale.net/_documents/GALS%40Scale_1_3_Gender%20BalanceTree.pdf Accessed March 2015.
- Mehra, Rekha, Payal Patel, Adithi Shetty, and Anne Golla. 2012. "Financial Services for Low-Income Women: Opportunities for Economic Empowerment?" International Center for Research on Women: www.icrw.org/publications/financial-services-low-income-women-opportunities-economic-empowerment
- Meinzen-Dick, Ruth, Nancy Johnson, Agnes Quisumbing, Jemimah Njuki, Julia Behrman, Deborah Rubin, Amber Peterman, and Elizabeth Waitanji. 2011. "Gender, Assets, and Agricultural Development Programs: A Conceptual Framework." CAPRI Working Paper No. 99 (November): <http://www.ifpri.org/sites/default/files/publications/capriwp99.pdf>
- Meinzen-Dick, Ruth, Barbara van Koppen, Julia Behrman, Zhenya Karelina, Vincent Akamandisa, Lesley Hope, and Ben Wielgosz. 2012. "Putting Gender on the Map." IFPRI Discussion Paper: <http://www.ifpri.org/publication/putting-gender-map>
- Meier zu Selhausen, Felix 2014. "What Determines Women's Participation in and within Cooperatives? Evidence from a Coffee Cooperative in Uganda." Utrecht University, Draft: <https://www.ebha-2014.eu/conference-user/program?day=50&time=35&paper=3221>
- Menon, Nidhiya, Yana Rodgers, and Alexis Kennedy. 2013. "Land Rights and Economic Security for Women in Vietnam." World Bank.
- Njuki J., E. Waithhanji, B. Sakwa, J. Kariuki, E. Mukewq, and J. Ngige. 2013. "Do Women Control What They Grow? The Gendered Use of KickStart's Pumps for Irrigation in Kenya and Tanzania." IFPRI GAAP Note.
- Norell, Dan, and Margie Brand. 2012. "Integrating Very Poor Producers into Value Chains: Field Guide." USAID, FHI360, and World Vision (October). www.microlinks.org/library/integrating-very-poor-producers-value-chains-field-guide
- Ofuoku, A. U. 2011. "Gender representation in agricultural extension workforce and its implications for agricultural advisory services." *Tropical Agricultural Research and Extension* 14, no. 2: 34-37.
- Oladele, O and M. Monkhei. 2008. "Gender ownership patterns of livestock in Botswana." *Livestock Research for Rural Development* no. 20 (10): <http://www.lrrd.org/lrrd20/10/olad20156.htm>
- Oxenham, John, Abdoul H. Diallo, Anne R. Katahoire, Anna Petkova-Mwangi, and Oumar Sall. 2002. "Skills and Literacy: Training for Better Livelihoods, a Review of Approaches and Experiences." Africa Region Human Development Working Paper Series, The World Bank: http://siteresources.worldbank.org/AFRICAEXT/Resources/skills_and_literacy.pdf
- Peterman, Amber, Julia Behrman, and Agnes Quisumbing. 2010. "A Review of Empirical Evidence on Gender Differences in Nonland Agricultural Inputs, Technology, and Services in Developing Countries." IFPRI.

- Quisumbing, Agnes, ed. 2003. *Household Decisions, Gender and Development*. IFPRI.
- Quisumbing, Agnes and Lauren Pandolfelli. 2009. "Promising Approaches to Address the Needs of Poor Female Farmers: Resources, Constraints, and Interventions." IFPRI Note 13: <http://www.ifpri.org/sites/default/files/publications/in13.pdf>
- Quisumbing, Agnes, Shalini Roy, Jemimah Njuki, Kakuly Tanvin, and Elizabeth Waithanji. 2013. "Can Dairy Value-Chain Projects Change Gender Norms in Rural Bangladesh?" Gender, Agriculture, & Assets Project, led by IFPRI and ILRI: <http://www.ifpri.org/publication/can-dairy-value-chain-projects-change-gender-norms-rural-bangladesh-0>
- Quisumbing, Agnes, Deborah Rubin, Cristina Manfre, Elizabeth Waithanji, Mara van den Bold, Deanna Olney, and Ruth Meinzen-Dick. 2014. "Closing the Gender Asset Gap: Learning from Value Chain Development in Africa and Asia." IFPRI.
- Rathgeber, Eva. 2011. "Rural Women's Access to Science and Technology in the Context of Natural Resource Management," UN Women, with FAO, IFAD, and WFP Expert Group Meeting: Enabling Rural Women's Economic Empowerment: Institutions, Opportunities and Participation: www.un.org/womenwatch/daw/csw/csw56/egm/Rathgeber-EP-6-EGM-RW-Oct-2011.pdf
- Schoar, Antoinette. 2009. "The Divide between Subsistence and Transformational Entrepreneurship." *Innovation Policy and the Economy* 10. Massachusetts Institute of Technology and NBER.
- Schulte, Jennifer, Sharon Williams, Danka Ropic, and Patricia Morris. 2014. "Toolkit for Integrating GBV Prevention and Response into Economic Growth Projects." USAID. www.usaid.gov/documents/1865/toolkit-integrating-gbv-prevention-and-response-economic-growth-projects
- Sebstad, Jennefer and Christina Manfre. 2011. "Field Report No. 12: Behavior Change Perspectives on Gender and Value Chain Development." ACIDI/VOCA, FHI 360, and USAID: http://www.usaid.gov/sites/default/files/documents/1862/gender_and_value_chain.pdf
- Snodgrass, Donald. 2014. "Agricultural Transformation in Sub-Saharan Africa and the Role of the Multiplier: A Literature Review." USAID LEO Report no. 4.
- Sorensen, Pernille. 1996. "Commercialization of Food Crops in Busoga, Uganda, and the Renegotiation of Gender." *Gender & Society* 10, no. 5 (October): 608-628
- The State Of Food and Agriculture 2011. 2011. Food and Agriculture Organization of the United Nations.
- Stern, Michelle. 2013. Ghana ADVANCE Gender Impact Assessment. ACIDI/VOCA: [http://acdivoca.org/sites/default/files/attach/legacy/site/Lookup/ACDI-VOCA-Ghana-ADVANCE-Gender-Impact-Assessment/\\$file/ACDI-VOCA-Ghana-ADVANCE-Gender-Impact-Assessment.pdf](http://acdivoca.org/sites/default/files/attach/legacy/site/Lookup/ACDI-VOCA-Ghana-ADVANCE-Gender-Impact-Assessment/$file/ACDI-VOCA-Ghana-ADVANCE-Gender-Impact-Assessment.pdf)
- Swaminathan, Hema, Rahul Lahoti, and J. Y. Suchitra. "Women's Property, Mobility, and Decisionmaking. Evidence from Rural Karnataka, India." IFPRI discussion paper (2012).
- Tanwir, Maryam and Tanwir Safdar. "The Rural Woman's Constraints to Participation in Rural Organizations." *Journal of International Women's Studies* 14 no. 3 (July 2013)

- “Understanding Facilitation.” USAID Briefing Paper. Accelerated Microenterprise Advancement Project (2012): www.microlinks.org/sites/microlinks/files/resource/files/Facilitation_Brief.pdf
- “USAID Youth in Development Policy.” 2012. USAID:
www.usaid.gov/sites/default/files/documents/1870/Youth_in_Development_Policy_0.pdf
- Waddington, Hugh, Brite Snilstveit, Jorge Garcia Hombrados, Martina Vojtkova, Jock Anderson, and Howard White. 2012. "Farmer Field Schools for Improving Farming Practices and Farmer Outcomes in Low-and Middle-Income Countries: A Systematic Review." The Campbell Collaboration: <http://www.campbellcollaboration.org/lib/project/203/>
- Waddington, Hugh and Howard White. 2014. “From Agricultural Extension to Adult Education.” *3ie Impact*.
- Walsh, Martin. 2013. "Women’s Collective Action in the Vegetable Sector in Tanzania," edited by Imogen Davies and Sally Baden. Oxfam International:
<http://www.oxfamblogs.org/estafrica/wp-content/uploads/2010/09/cs-women-collective-action-tanzania-270313-en.pdf>
- Westermann, Olaf, Jacqueline Ashby, and Jules Pretty. 2005. “Gender and Social Capital: The Importance of Gender Differences for the Maturity and Effectiveness of Natural Resource Management Groups.” *World Development* 33 no. 11: 1783-1799.

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