



# WOMEN'S EMPOWERMENT IN AGRICULTURE INDEX







#### **OVERVIEW**

omen play a critical and potentially transformative role in agricultural growth in developing countries, but they face persistent obstacles and economic constraints limiting further inclusion in agriculture. The Women's Empowerment in Agriculture Index (WEAI) measures the empowerment, agency, and inclusion of women in the agriculture sector in an effort to identify ways to overcome those obstacles and constraints. The Index is a significant innovation in its field and aims to increase understanding of the connections between women's empowerment, food security, and agricultural growth. It measures the roles and extent of women's engagement in the agriculture sector in five domains: (I) decisions about agricultural production, (2) access to and decisionmaking power over productive resources, (3) control over use of income, (4) leadership in the community, and (5) time use. It also measures women's empowerment relative to men within their households.

The WEAI is a composite measurement tool that indicates women's control over critical parts of their lives in the household, community, and economy. It allows us to identify women who are disempowered and understand how to increase autonomy and decisionmaking in key domains. The WEAI is also a useful tool for tracking progress toward gender equality, which is one of the Millennium Development Goals.

#### **Purpose**

The WEAI was developed to track the change in women's empowerment levels that occurs as a direct or indirect result of interventions under Feed the Future, the US government's global hunger and food security initiative. The United States Agency for International Development, International Food Policy Research Institute, and Oxford Poverty and Human Development Initiative collaboratively developed it.

Ultimately, the Index will be used for performance monitoring and impact evaluations of Feed the Future programs. Toward that end, in 2011, pilot surveys were conducted in regions of three countries: Bangladesh, Guatemala, and Uganda (see Box I). The WEAI is also a useful tool for policymakers, development organizations, and academics seeking to inform efforts to increase women's empowerment.

#### **Structure**

The Women's Empowerment in Agriculture Index is an innovative new tool composed of two sub-indexes: one measures the five domains of empowerment for women, and the other measures gender parity in empowerment within the household. It is an aggregate index reported at the country or regional level that is based on individual-level data on men and women within the same households.

Five domains of empowerment (5DE): This sub-index assesses whether women are empowered across the five domains examined in the WEAI. (See Figure I.) For the women who are disempowered, it also shows the percentage of domains in which they meet the required threshold and thus experience "sufficiency." The 5DE sub-index captures women's empowerment within their households and communities.

Gender Parity Index (GPI): This sub-index reflects the percentage of women who are as empowered as the men in their households.<sup>2</sup> For those households that have not achieved gender parity, the GPI sub-index shows the gap that needs to be closed for women to reach the same level of empowerment as men. Using a survey method that goes beyond the traditional practice of interviewing only a household "head" (often a male) to interview both a principal male and a principal female, the GPI allows Feed the Future and others to compare the agricultural empowerment of men and women living in the same household.

Based on both sub-indexes, the WEAI is thus an aggregate index that shows the degree to which women are empowered in their households and communities and the degree of inequality between women and men within the household. Therefore, progress toward empowering women in agriculture will be achieved by empowering them in the five domains and achieving gender parity within the household.

#### **BOX I. PILOTING THE WOMEN'S EMPOWERMENT IN AGRICULTURE INDEX**

This Index is an innovation in the measurement of women's empowerment, which was developed from July 2011 to February 2012 based on pilot surveys conducted between September to November 2011 in Feed the Future's zones of influence in three countries with markedly different sociocultural contexts: Bangladesh, Guatemala, and Uganda. The pilot covered 450 households (800 individuals) in Bangladesh and 350 households (625 individuals) each in Guatemala and Uganda, with roughly 20 percent single-female households and 80 percent dual-adult (male and female adult) households. The survey was piloted in southern Bangladesh; western, primarily indigenous parts of Guatemala; and areas spread across northern, central, and eastern Uganda. (See "Country Pilots and Results" section.) Therefore, the results are not representative of the countries as a whole, and the index values listed refer to the pilot sample averages.

I "Sufficiency" or "adequacy" for each indicator means that the woman's achievements exceed the threshold for that indicator.

<sup>2</sup> While other indexes of gender parity exist, the one used here is a survey-based indicator of parity in empowerment within the household.

FIGURE I. THE FIVE DOMAINS OF EMPOWERMENT IN THE WEAI

Domain	Indicators	Weight
Production	Input in productive decisions	1/10
	Autonomy in production	1/10
Resources	Ownership of assets	1/15
	Purchase, sale, or transfer of assets	1/15
	Access to and decisions on credit	1/15
Income	Control over use of income	1/5
Leadership	Group member	1/10
	Speaking in public	1/10
Time	Workload	1/10
	Leisure	1/10

#### THE FIVE DOMAINS OF EMPOWERMENT

The five domains are agricultural production, resources, income, leadership, and time (see Figure I), and they comprise ten indicators. Each domain is weighted equally, as are each of the indicators within a domain. The 5DE sub-index is constructed using a robust multidimensional methodology known as the Alkire Foster Method (see Box 2). It is a measure of empowerment rather than disempowerment that shows how many domains women are empowered in. The 5DE sub-index contributes 90 percent of the weight to the WEAI.

The domain indicators are built on the following definitions.

- Production: Sole or joint decisionmaking over food and cash-crop farming, livestock, and fisheries as well as autonomy in agricultural production
- Resources: Ownership, access to, and decisionmaking power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit
- Income: Sole or joint control over income and expenditures
- Leadership: Membership in economic or social groups and comfort in speaking in public
- Time: Allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities

A woman is defined as empowered in 5DE if she has adequate achievements in four of the five domains or is empowered in some combination of the weighted indicators that reflect 80 percent total adequacy. A key innovation of the Index is that it is able to show in how many domains women are empowered and at the same time reveal the connections among areas of disempowerment. This enables decisionmakers to focus on improving the situation of the most

disempowered women. In addition to tracking the nature of empowerment in five domains, the WEAI measures how empowered women are relative to men in the same household, which is critical to understand the gender empowerment gap.

#### **BOX 2. THE ALKIRE FOSTER METHOD**

The WEAI is constructed using the Alkire Foster Method developed by Sabina Alkire, director of the Oxford Poverty and Human Development Initiative (OPHI) at the University of Oxford, and James Foster of George Washington University and OPHI. A method for measuring multidimensional poverty, well-being, and inequality, it measures outcomes at the individual level (person or household) against multiple criteria (domains and/or dimensions and indicators).

The method is flexible and can be applied to measure poverty or well-being, to target services or conditional cash transfers, and to design and sequence interventions. Different domains (for example, education) and indicators (for example, how many years of education a person has) can be chosen depending on the context and purpose of the exercise.

The WEAI shows, on aggregate, who is empowered by analyzing in which domains women are empowered and how these compare to men's. The Alkire Foster Method is unique in that it can distinguish between, for example, disempowered people who are not empowered in just one domain versus those who are not empowered across three domains at the same time.

#### THE GENDER PARITY INDEX

The GPI is a relative inequality measure that reflects the inequality in 5DE profiles between the primary adult male and female in each household. In most but not all cases, these are husband and wife, but they can be the primary male and female decisionmaker regardless of their relationship to each other. By definition, households without a primary adult male are excluded from this measure, and thus the aggregate WEAI uses the mean GPI value of dual-adult households. The GPI shows the percentage of women who have achieved parity with respect to their male counterparts. In cases of gender disparity, the GPI reflects the relative empowerment gap between the woman's 5DE score with respect to the man's. The GPI score can thus be improved by increasing the percentage of women who have gender parity or, for those women who are less empowered than men, by reducing the empowerment gap between the male and female of the same household.

#### **BACKGROUND**

#### Women's Roles in Agriculture

Feed the Future supports the inclusion of poorer and more economically vulnerable populations in economic growth strategies in the agriculture sector in order to have a transformational effect on regional economies and restructure local production, distribution, and consumption patterns for long-term, sustainable development. Because women play a prominent role in agriculture and due to the persistent economic constraints they face, women's empowerment has become a main focus of Feed the Future. Empowering women is particularly important to achieving the Feed the Future objective of inclusive agriculture sector growth. (More information is available at www.feedthefuture.gov.)

The concept of inclusive agriculture sector growth is broad and multidimensional. Women's empowerment in agriculture is an important component of that inclusive growth, and Feed the Future seeks to measure and monitor women's roles and engagement in numerous areas of the agriculture sector.

#### Why Gender Parity?

Gender parity reflects the importance placed by the international development community on achieving gender equality, the third Millennium Development Goal. The gender parity measure is grounded in evidence showing that equalizing access to assets and opportunities for men and women helps achieve better development outcomes—such as better health and nutrition for women and their families, greater investments in education for children, and poverty reduction.

#### **Survey Innovations**

While cross-national datasets exist on some domains of women's empowerment (including detailed modules on household decisionmaking in nationally representative surveys), these do not typically have information on women's empowerment in agriculture. In addition, these surveys are typically administered only to women and fail to capture their empowerment relative to men within the same household.

To overcome this obstacle, a household survey interviewing men and women from the same household was developed to provide data for the Index. The sub-indexes selected to measure women's empowerment are applicable to the broader population of women, both those in households with male adults and those with only female adults. The survey contained experiments in questionnaire design and solicited information around the five domains of empowerment in different ways to test how specific and relevant questions were for men and women, whether respondents were able to answer the questions as they were phrased, and how well they correlated with household measures of well-being. After the pilot surveys were completed, case studies were conducted among selected women and men in the same sites, using narratives to validate and explain answers and describe the individual women's daily lives as well as conceptualize women's empowerment in agriculture.

#### **Scoring the WEAI**

Measuring the 5DE results in a number ranging from zero to one, where higher values indicate greater empowerment. The score has two components. First, it reflects the percentage of women who are empowered (H<sub>o</sub>). Second, it reflects the percentage of domains in which those women who are not yet empowered (H<sub>o</sub>) already have adequate achievements. In the 5DE formula,  $A_a$  is the percentage of dimensions in which disempowered women have adequate achievements:  $5DE = H_a + H_a$  ( $A_a$ ), where  $H_a + H_b = 100\%$  and  $0 < A_a < 100\%$ .

This can also be written, following the Alkire Foster methodology, as  $\{I - (H_n \times A_n)\}$ , where  $A_n = (I - A_n)$  and reflects the

"When I go to do work, then I am told, 'You cannot do this work.'
People will talk bad about you...
you cannot do any work except what your husband will tell you."

---WOMAN, BANGLADESH, 60 YEARS OLD

percentage of domains in which disempowered women on average do not have adequate achievements.

Because of this structure, the 5DE offers clear incentives for change. First, the 5DE score can be increased by increasing the percentage of empowered women. Second, the 5DE can be increased by ensuring that disempowered women are empowered (or, have adequate achievements) in a greater percentage of domains.

The innovative GPI also ranges from zero to one, with higher values indicating greater gender parity. This sub-index is similar to the 5DE. First, it reflects the percentage of women who have gender parity. Specifically, it shows the percentage of women who are living in households with an adult primary male where the women's empowerment scores are at least equal to the men's in their household  $(H_{\mathrm{GPI}})$ . When respondents have been identified as "empowered," they are given a uniform achievement. Now, define  $H_{\text{WGP}}$  as the percentage of women without gender parity. Second, for women who do not have gender parity (because they are not empowered, and their 5DE score is less than their male counterpart's), the GPI shows the percentage shortfall she experiences relative to the male in her household ( $I_{\text{GPI}}$ ). The overall formula is the product of these two numbers, following the Foster Green Thorbecke (FGT) "poverty gap" measure: GPI =  $\{I - (H_{WGP} \times I)\}$  $I_{GPI}$ ). Thus the 5DE is (I - HA), and the GPI is (I - HI). Both show the "positive" form of an FGT sub-index, with the 5DE being multidimensional and the GPI being unidimensional.

The total WEAI score is computed as a weighted sum of the country- or regional-level 5DE and the GPI. Thus, improvements in either the 5DE or GPI will increase the WEAI. This is illustrated in the results from the pilot studies.

# COUNTRY PILOTS AND RESULTS

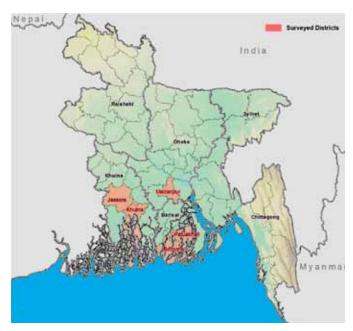
#### Southwestern Bangladesh Pilot

The Bangladesh pilot was conducted in the south and south-western regions of the country, close to the Indian border, in these districts: Barguna, Jessore, Khulna, Madaripur, and Patuakhali.

The WEAI for the sample areas of Bangladesh is 0.749. It is a weighted average of the 5DE sub-index value of 0.732 and the GPI sub-index value of 0.899.

The 5DE for southwestern Bangladesh shows that 31.9 percent of women are empowered. In the pilot areas, the 68.1 percent of women who are not yet empowered, still have, on average, adequate achievements in 60.7 percent of domains. Thus the overall 5DE is  $31.9\% + (68.1\% \times 60.7\%) = 0.732$ . The GPI, meanwhile, shows that 59.8 percent of women have gender parity with the primary male in their household. Of the 40.2 percent of women who are less empowered,

#### WEAI PILOT SURVEY AREAS—BANGLADESH



Source: See notes on page 12.

the empowerment gap between them and the male in their household is quite large at 25.2 percent. Thus the overall GPI in the pilot area is  $\{1 - (40.2\% \times 25.2\%)\}$  or 0.899.

#### WHO IS EMPOWERED?

The 5DE deliberately focused only on issues of empowerment in agriculture. In order to show clearly how empowerment in women's specific agricultural roles relates to their wealth, their levels of education, and their empowerment in other domains, the pilot survey also included questions related to these other household and individual characteristics.

Wealth: A wealth index was constructed that divided the respondents of the survey into five quintiles according to their relative command over assets.<sup>3</sup> Wealth is significantly and positively associated with empowerment, but it is not sufficient to ensure it: 16 percent of women in the poorest quintile were empowered, compared with 45 percent in the richest 20 percent of the population. The fact that 55 percent of women in the top wealth quintile were not yet empowered indicates that greater wealth increases empowerment but does not guarantee it.

**Education:** In education, most of the women in the sample had completed either a primary education or less: only six women had a secondary education, and one had tertiary. Interestingly, the relationship between education and empowerment in agriculture is insignificant for both men and women: 31 percent of women with less than a primary-school

<sup>3</sup> The wealth index is similar to the one used in the Demographic and Health Surveys and is constructed using principal components analysis, taking into account assets, dwelling characteristics, and other indicators.



education were empowered, and 33 percent—almost the same percentage—of women who had completed primary school were empowered. Among the seven women who had attained secondary school and higher, only two women were empowered. So, in this pilot area, women's empowerment in agriculture was not defined by their educational attainment.

Age and hunger: Results by age were also distinct for women: 36 percent of women aged 26 to 55 were empowered, compared with less than 26 percent of those in younger or older age categories. This may reflect the relative lack of power of younger females, who are typically daughters-in-law, and much older women, who may now be dependent on sons for support.

A household hunger score (HHS) was also computed following the methodology of the USAID FANTA-2 project.4 The relationship between empowerment in agriculture and living in a household reporting higher HHS was not statistically significant.

Other domains: The literature on women's empowerment also suggests that empowerment in one domain may not necessarily create empowerment in other domains. Hence, the survey included information on women's decisionmaking and autonomy with respect to other topics such as minor household expenditures, actions in the case of serious health problems, protection from violence, expression of religious faith, daily tasks, and use of family planning. The autonomy questions convey whether a woman's action was shaped more by her own values than by a desire to please others or avoid harm (coerced action).

Women who were empowered by the 5DE reported slightly higher decisionmaking and autonomy with regard to minor expenditures, health problems, or protection from violence. However, only the relationship between decisionmaking and autonomy in protection from violence was statistically significant. Women who were empowered in agriculture also reported greater decisionmaking and autonomy with respect to religious faith, their own daily tasks, and use of family

4 See http://www.fantaproject.org/publications/tnl2.shtml.

planning. With respect to family planning, the association was statistically significant: 75 percent of women who were empowered in agriculture felt they could make family planning decisions, compared to 61 percent among women who were not empowered in agriculture.

#### WHAT ARE THE GAPS IN WOMEN'S **EMPOWERMENT?**

According to the pilot research, the domains in the Bangladesh sample areas that contribute most to women's disempowerment are lack of control over resources, weak leadership and influence in the community, and lack of control over income.

In terms of the ten indicators, Figure 2 reports the percentage of women who are disempowered and are deprived in each of the ten indicators. Recall that the 5DE indicators carry different weights, with control over use of income being weighted at 20 percent and the other indicators between 7 percent and 10 percent each.

More than half of the women in the survey do not belong to any group. Forty-five percent of women are not yet empowered and lack access to credit and the ability to make decisions about it, and 28 percent feel little decisionmaking power over the purchase, sale, or transfer of assets.

The configuration of men's deprivations in empowerment is strikingly different from women's in the pilot regions of Bangladesh (see Figure 3). The lack of leadership and influence in the community contribute much more to men's disempowerment than to women's, as does a lack of access to credit and time poverty. For example, 49 percent of men reported feeling uncomfortable speaking in public versus only 32 percent of women. On the other hand, men report very little disempowerment in control over income and in decisionmaking around agricultural production and income generation compared to women.

FIGURE 2. PROPORTION OF WOMEN NOT **EMPOWERED AND WHO HAVE INADEQUATE ACHIEVEMENTS BY INDICATOR IN BANGLADESH SAMPLE** 

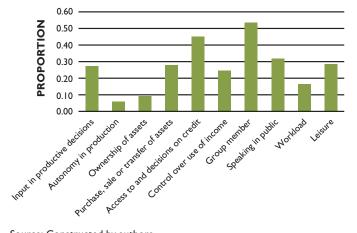
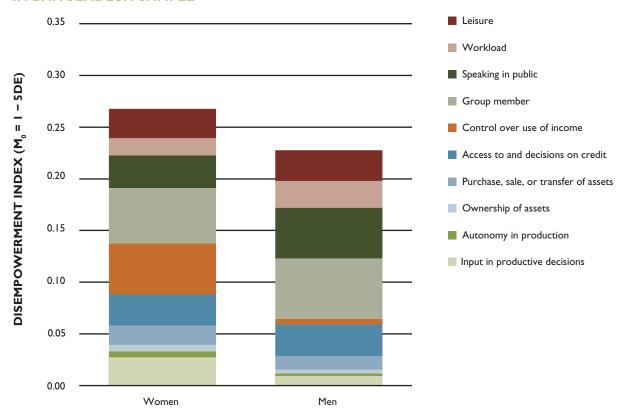


FIGURE 3. CONTRIBUTION OF EACH INDICATOR TO DISEMPOWERMENT FOR WOMEN AND MEN IN BANGLADESH SAMPLE



Source: Constructed by authors

#### Western Highlands Guatemala Pilot

The Guatemala pilot was conducted in the country's Western Highlands, in the *departamentos* (departments) of El Quiché, Huehuetenango, Quetzaltengo, San Marcos, and Totonicapán—areas with a high concentration of indigenous populations.

The WEAI for the Western Highlands of Guatemala is 0.692. It is a weighted average of the 5DE sub-index value of 0.678 and the GPI sub-index value of 0.813.

The 5DE for the Western Highlands of Guatemala shows that 22.8 percent of women are empowered. The 77.2 percent of women who are not yet empowered, still have, on average, adequate achievements in 58.3 percent of dimensions. Thus the overall 5DE is  $\{22.8\% + (77.2\% \times 58.3\%)\} = \{1 - (77.2\% \times 41.7\%)\} = 0.678$ .

The GPI for the Western Highlands of Guatemala shows that 35.8 percent of women have gender parity with the primary male in their household. Of the 64.2 percent of women who are less empowered, the empowerment gap between them and the male in their household is quite large at 29 percent. Thus the overall GPI is  $(I - (64.2\% \times 29.1\%))$ , or 0.813.

#### WHO IS EMPOWERED?

**Wealth:** Wealth is not strongly associated with empowerment in agriculture in the Guatemala pilot regions: 19 percent

#### WEAI PILOT SURVEY AREAS—GUATEMALA



Source: See notes on page 12.

"An empowered person is someone who has the power to decide—to say, if they have land, 'Well, I can go farm, I can grow crops, I can plant seeds'—or if they have animals, to say, 'I can sell them without going to ask permission.' This is a person who has the power to decide about their things, their life, their actions."

—WOMAN, GUATEMALA, 39 YEARS OLD

of women in the poorest quintile are empowered, compared with 27 percent in the richest 20 percent of the population. It is striking that on average 76 percent of women in the top three wealth quintiles are not yet empowered (including 73 percent of the richest 20 percent), indicating that wealth is a very imperfect proxy for women's empowerment in agriculture. Indeed, the associations with wealth are not statistically significant.

**Education:** In education, most of the women in the sample have either a primary education or less. In this context, education level does seem to have a marked, statistically significant influence: only 20 percent of women with less than a primary-school education are empowered in agriculture while 35 percent who have completed primary school are empowered.

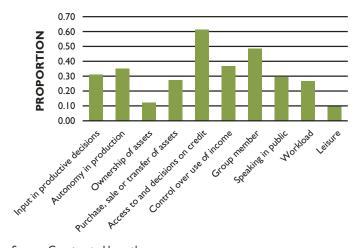
Age and hunger: Results by age are even more distinct (and statistically significant) for women: 31 percent of women aged 26 to 45, and 29 percent of those older than 65 are empowered, compared with 6 percent of those under 26 and less than 19 percent of those in other age cohorts. In contrast, among males the levels of empowerment were constant across age categories. The percentage of disempowered women is higher in households reporting higher hunger scores, although this association is not statistically significant.

Other domains: In Guatemala, there was a clear association between women's empowerment in agriculture and empowerment in other domains: greater decisionmaking and autonomy with respect to minor household expenditures, serious health problems, protection from violence, religious faith, their own daily tasks, and use of family planning. Further, the variable "autonomy" showed even greater (and statistically significant) differences between those who are empowered in agriculture and those who are not. For example, 85 percent of women who are empowered in agriculture feel they could



make decisions related to serious health problems, compared to 74 percent among women who are not empowered in agriculture. Autonomy results were similarly striking: 85 percent of women who are empowered in agriculture report autonomy with respect to serious health problems, but only 49 percent of disempowered women report this type of autonomy.

FIGURE 4. PROPORTION OF WOMEN NOT EMPOWERED AND WHO HAVE INADEQUATE ACHIEVEMENTS BY INDICATOR IN GUATEMALA SAMPLE



"Being empowered, it means that the woman can do things too, not just the man."

—WOMAN, GUATEMALA, 63 YEARS OLD

### WHAT ARE THE GAPS IN WOMEN'S EMPOWERMENT?

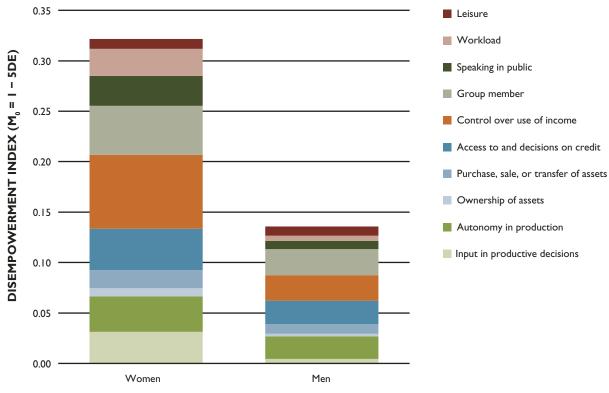
The domains that contribute most to Guatemalan women's disempowerment are lack of leadership in the community and control over use of income. The third largest contribution comes from the domain related to control over resources.

As shown in Figure 4, more than 60 percent of women are not yet empowered and lack access to credit and the ability to make decisions about it, 49 percent are not group members, and more than 37 percent lack sole or joint decisionmaking power over income.



The configuration of men's deprivations in empowerment is similar to that of women's in the pilot regions of Guatemala, but unlike in the pilot areas of Bangladesh and Uganda, men have uniformly more empowerment than women in all of the indicators (see Figure 5).

### FIGURE 5. CONTRIBUTION OF EACH INDICATOR TO DISEMPOWERMENT FOR WOMEN AND MEN IN GUATEMALA SAMPLE





#### **Uganda Pilot**

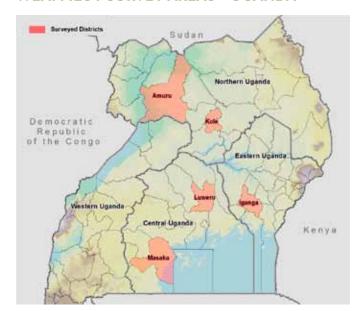
The Uganda pilot covered five spatially dispersed rural districts in the northern region (Amuru and Kole), central region (Luwero and Masaka), and eastern region (Iganga).

The WEAI for the pilot districts in Uganda is 0.789. It is a weighted average of the 5DE sub-index value of 0.777 and the GPI sub-index value of 0.898.

The 5DE for the pilot districts in Uganda shows that 37.3 percent of women are empowered. The 62.7 percent of women who are not yet empowered, on average, have still achieved empowerment in 64.4 percent of dimensions. Thus the overall 5DE is  $37.3\% + (62.7\% \times 64.4\%) = 0.777$ .

The GPI for the selected districts of Uganda shows that 54.4 percent of women have gender parity with the primary male in their household. Of the 45.6 percent of women who are less empowered, the empowerment gap between them and the male in their household is 22.4 percent. Thus the overall GPI is  $(I-(45.6\% \times 22.4\%))$ , or 0.898.

#### WEAI PILOT SURVEY AREAS—UGANDA



Source: See notes on page 12.

# "People who are empowered 'see change in their lives."

—MAN. UGANDA. 46 YEARS OLD

#### WHO IS EMPOWERED?

Wealth: In contrast to the Guatemala pilot areas, wealth was clearly associated with empowerment in agriculture in Uganda's pilot regions: 29 percent of women in the poorest quintile were empowered, compared with 62 percent in the richest 20 percent of the population. In the second and third quintiles, around 27 percent of women were empowered in agriculture, rising to 40 percent in the fourth quintile and 62 percent in the fifth.

**Education:** Education level also has a significant positive influence: 35 percent of women with less than a primary-school education are empowered while 45 percent of those who have completed primary school are empowered.

Age and hunger: Twenty-eight percent of women under 26 are empowered in agriculture, 53 percent of women between 46 and 55 years old are empowered, and 45 percent of those between 56 and 65 years old are empowered. In contrast, the rates of empowerment among males are less distinct by age group. The percentage of disempowered women is significantly higher in households reporting higher hunger scores.

Other domains: In Uganda's pilot districts, women who are empowered in agriculture also reported significantly greater decisionmaking and autonomy with respect to almost all domains. Similar to the data from Guatemala, the variable "autonomy" showed even greater differences between those who are empowered in agriculture and those who are not.

### WHAT ARE THE GAPS IN WOMEN'S EMPOWERMENT?

The domains that contribute most to women's disempowerment are lack of leadership in the community and time burden, with control over resources making the third largest contribution to disempowerment.

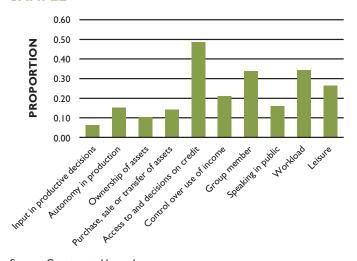
As seen in Figure 6, 49 percent of women lack access to or decisionmaking ability over credit, more than one-third do not have a manageable workload, and more than 33 percent are not members of any group. More than 21 percent lack sole or joint decisionmaking authority over income.

The configuration of men's deprivations in empowerment is somewhat different from women's in the pilot regions of Uganda. As in the pilot areas of Bangladesh, men report relatively less disempowerment in decisionmaking over income. Men also have less time poverty and relatively greater achievements in community leadership than women (see Figure 7).

#### **WHAT'S NEXT?**

The pilot WEAI questionnaires included alternative phrasing in order to ensure the highest level of validity, and only questions used in the final Index will be included in the rollout of the WEAI questionnaires for Feed the Future monitoring in 19 focus countries. These questions will be adapted to specific

FIGURE 6. PROPORTION OF WOMEN NOT EMPOWERED AND WHO HAVE INADEQUATE ACHIEVEMENTS BY INDICATOR IN UGANDA SAMPLE



Source: Constructed by authors.

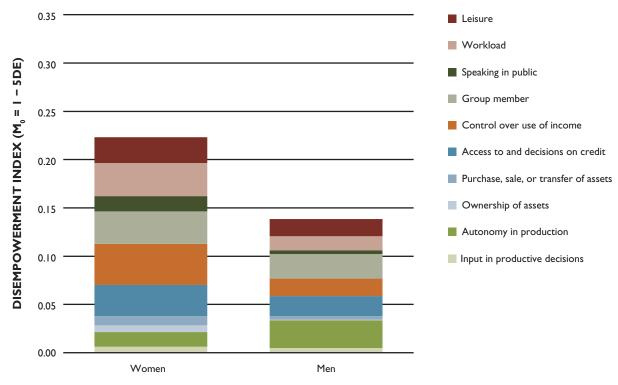
country settings since Feed the Future supports countrydriven approaches to advance global food security, improve nutrition, and reduce poverty.

The WEAI partners will continue validating the Index and comparing it with other measures of individual and household well-being. This will include testing the consistency of the relationships between empowerment and the underlying determinants of empowerment in larger samples. These efforts will help to promote transparency and ensure that investments are targeted for maximum impact. The partners anticipate that, because of its innovative nature and in-depth coverage of agriculture and food security, other organizations implementing agriculture and rural development projects will also adopt the Index to monitor progress and assess impact.

#### **Roles of the Partners**

Feed the Future, through support from USAID, defined the five domains, provided technical input on the development of the pilot survey, and provided overall policy guidance for the Index, which was commissioned to support the monitoring and evaluation of their programs. The International Food Policy Research Institute provided overall coordination for this project, designed and implemented the household pilot survey, and developed the individual case studies, working with in-country collaborators. The Oxford Poverty and Human Development Initiative developed the WEAI from the survey data and adapted the Alkire Foster Method, which underpins the Index.

FIGURE 7. CONTRIBUTION OF EACH INDICATOR TO DISEMPOWERMENT FOR WOMEN AND MEN IN UGANDA SAMPLE



# ABOUT THE INDEX PARTNERS

# **FEED THE FUTURE** www.feedthefuture.gov



Feed the Future is the US government's global hunger and food security initiative. With a focus on smallholder farmers, particularly women, Feed the Future supports countries in developing their agriculture sectors as a catalyst to generate broad-based economic growth that increases incomes and reduces hunger. As the overall framework to address global hunger, Feed the Future recognizes the importance of providing food aid and other humanitarian assistance during crises to save lives and protect livelihoods. Feed the Future also integrates nutrition interventions to ensure that investments lead both to improved agriculture and better health, and supports conflict mitigation and good governance efforts required to achieve the goals of reducing poverty and undernutrition.

In support of country-driven priorities, Feed the Future draws upon resources and expertise of agencies across the US government and harnesses the power of the private and public sectors to transform agricultural development. These collective efforts advance global stability and prosperity by improving the most basic of human conditions: the need that families and individuals have for a reliable source of quality food and sufficient resources to purchase it.

# **USAID** www.usaid.gov

The US Agency for Inter-



national Development is an independent federal government agency that receives overall foreign policy guidance from the Secretary of State. USAID plays a leadership role in implementing Feed the Future. Across the globe, USAID's efforts support long-term and equitable economic growth and advance US foreign policy objectives. Key focus areas include: economic growth, agriculture and trade; global health; and democracy, conflict prevention, and humanitarian assistance.

#### IFPRI





poverty and end hunger and malnutrition. IFPRI's mission is to provide policy solutions that ensure that all people in developing countries, particularly the poorest and other marginalized groups, have access to safe, sufficient, and nutritious food at all times. The Institute is one of 15 centers supported by the Consultative Group on International Agricultural Research (CGIAR).

IFPRI is a leader in gender and household decisionmaking research in developing countries. Its gender and intrahousehold research program (1994–2001) provided empirical evidence that the bargaining power of men and women within households affects the allocation of household resources and that increasing resources controlled by women improves agricultural productivity, household food security, and investments in the next generation. The Gender and Assets research program (2009–present) is examining ways that agricultural development programs can reduce the gap in assets controlled by men and women and thereby more effectively achieve development outcomes. (Read more about this program at www.ifpri.org/ourwork/program/gender-and-assets.)

#### **OPHI**

#### www.ophi.org.uk

The Oxford Poverty and Human Development Initiative (OPHI) is an economic research centre within the Oxford



Department of International Development at the University of Oxford. OPHI aims to build a more systematic framework for reducing multidimensional poverty, grounded in people's experiences and values. Creating real tools that inform policies to reduce poverty, OPHI has two main research themes: multidimensional poverty measurement and missing dimensions of poverty data (improving data on topics like violence and empowerment).

OPHI developed the Alkire Foster method for multidimensional measurement, which underpins the WEAI. It is being implemented at national and international levels and is currently being used and adapted by the UN Development Programme in their flagship *Human Development Report* (along with the Multidimensional Poverty Index) as well as the Governments of Bhutan, Colombia, and Mexico.

Copyright © 2012 International Food Policy Research Institute. All rights reserved. Second printing.

This publication is an output of the Women's Empowerment in Agriculture Index and has not been peer reviewed. Any opinions are those of the authors and do not necessarily reflect the policies of IFPRI or its partners. The boundaries, names, and designations used in the maps do not imply official endorsement by IFPRI or its partners.

Photo credits: Cover and p. 6 @ 2012 Shafiqul Alam Kiron; p. 8 and 9 @ 2012 Alfonso Porres; p. 10 @ 2012 Leah Natongi.

Map source notes (pages 5, 7, and 10): Hijmans, R. 2011. GADM database of Global Administrative Areas, Version 2. University of Berkeley, CA, US, and the International Rice Research Institute. Accessed December 2011. www.gadm.org; Lehner, B., K. Verdin, and A. Jarvis. 2006. HydroSHEDS Shuttle Radar Topography Mission Digital Elevation Model. Washington, DC: World Wildlife Fund. http://hydrosheds.cr.usgs.gov.