



ECWG

EVIDENCE CONSORTIUM ON WOMEN'S GROUPS

# Guide for Measuring Women's Empowerment and Economic Outcomes in Impact Evaluations of Women's Groups

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Women learn about banking and financial literacy in a mother's support group in Gombe, Nigeria Source: Gates archive/Andrew Esiebo.

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## Introduction

Women's groups have emerged as an important intervention strategy to improve women's access to opportunities, well-being, and empowerment and advance gender equality in low- and middle-income countries (LMICs). Group-based interventions have already been institutionalized and implemented at scale in South Asia, including in India and Bangladesh, and increasingly in sub-Saharan Africa. For example, group-based approaches to improve access to savings and credit have expanded considerably after initial pilots were conducted with microfinance groups in South Asia, and after CARE implemented experiments with Village Savings and Loan Associations (VSLAs) in sub-Saharan Africa.<sup>1,2</sup> In India, the National Rural Livelihoods Mission (NRLM) now aims to mobilize 70 million households into self-help groups (SHGs)<sup>3</sup> as part of the largest women's group initiative in the world. Although women's groups and collectives in sub-Saharan Africa are considerably smaller, they are growing. For example, the Nigeria for Women Project (NFWP) aims to reach 324,000 women across six states in Nigeria.<sup>4</sup> In Uganda, the World Bank is supporting the sustainable livelihood sub-component (SLP) of the Northern Ugandan Social Action Fund (NUSAF 3), which was recently piloted in nine districts (Kitgum, Gulu, Nebbi, Lira, Masindi, Kotido, Soroti, Butaleja, and Kapchorwa).<sup>5</sup>

This document presents a guide for measuring women's empowerment and economic outcomes to guide the work of the Evidence Consortium on Women's Groups (ECWG) and the community of researchers that focus on women's groups. The ECWG was developed to strengthen, expand, and disseminate the global evidence base on women's groups and support the investments of the Gates Foundation's Gender Equality team. While evidence on the impact of women's groups is growing, measurement challenges limit the ability to produce reliable and comparable estimates across impact evaluations. For example, studies often use inconsistent definitions of women's empowerment, as well as different approaches to measure empowerment.<sup>6,7,8</sup> Evidence on the reliable measurement of consumption is also scant and inconsistent, despite the widespread use of food and nonfood expenditure survey modules.<sup>9,10</sup> Additionally, even though women's groups may seek to improve asset ownership among women specifically, most impact evaluations estimate impacts on household-level asset ownership, as opposed to ownership at the individual level.<sup>11</sup> Finally, measuring what it is about a group that leads to success—for instance, the shared or pooled resources, experiences, or access; the power of numbers; or the gender consciousness—requires more data and is difficult to quantify, particularly as measurement instruments are not readily available.

This guide provides a collection of field-tested survey instruments and questions for measuring women's empowerment and economic outcomes in quantitative impact evaluations and mixed-methods studies of women's groups, along with recommendations on how to use these tools. The purpose of the guide is to explicitly link the foundational work on how to measure women's empowerment and economic outcomes<sup>12,13,14,15</sup> to theories of change that connect women's groups to these outcomes. Whenever possible, we draw from established instruments and cite the relevant research. By consolidating questions from accepted instruments, and by filtering and adapting questions to ensure they are applicable to women's groups, our recommendations are intended to help researchers who are seeking to understand current good practice in the

evaluation and measurement of women's empowerment and economic outcomes. In addition, the guide may help to identify gaps in the research and spur the development of innovative and more reliable measures that can foster greater learning across the research community.

We begin this guide by describing the theories of change for the most commonly implemented groups that focus on women's empowerment and economic outcomes, including economic SHG programs and savings groups (SGs). In these descriptions, we provide examples of theories of change for large-scale, government-supported women's group programs in India, Nigeria, and Uganda. Next, we describe an approach for measuring women's empowerment and economic outcomes based on these theories of change. We primarily rely on existing measurement instruments to ensure consistency, and we present specific survey questions for measuring women's economic, social, psychological, and political empowerment; savings and credit; women's labor force participation and income; entrepreneurship; and asset ownership and consumption. A portfolio evaluation of the Gates Foundation's investments in women's groups found that more uniform data collection and metrics, and more explicit theories of change, are necessary for analyzing the collective effects of women's groups on desired outcomes.<sup>16</sup>

In practice, diverse theories of change, program designs, and contextual considerations necessitate different evaluation approaches. For example, approaches to measuring women's empowerment must vary based on the context and the theory of change underlying the program in question. At the same time, it is often important to be able to compare outcomes across contexts. To enable such comparisons, we recommend some standardized measures of women's empowerment, based on the portfolio evaluation's recommendation to use more uniform data collection and metrics.<sup>17</sup> We also include a few examples of locally tailored measures of women's empowerment. It is possible to support broader learning if researchers include locally tailored, context-specific measures in addition to (rather than instead of) more globally comparative measures. Standardized outcome measures are critical for making global comparisons on the impact and cost-effectiveness of women's groups, and for encouraging a community of learning around these groups. We recognize, however, that not all evaluations will have sufficient resources to include all outcome measures. Further, evaluations may prioritize or omit certain outcomes or measurement components based on their target population, theory of change, intervention components, or specific objectives.

In addition to measures at the individual and household level, we include a section on measuring group characteristics, functioning, and composition. Although women's groups ultimately intend to improve women's empowerment and well-being at the individual level, it is necessary to include measures for group characteristics, functioning, and composition in order to examine hypotheses about the pathways through which women's groups can contribute to a range of development outcomes. This includes measuring fidelity of implementation (to understand operational and implementation differences), social cohesion, and the heterogeneity of group composition, recognizing that group characteristics, functioning, and composition are expected to moderate and mediate the effects of women's groups.

Although the rest of this document primarily focuses on quantitative measurement, it is important to note that mixed-methods research can foster an in-depth understanding of

implementation models and pathways to change for women's groups.<sup>18</sup> Current studies on the impact of women's groups provide limited documentation on the type or functioning of different implementation models. Mixed-methods research can help to identify the characteristics of successful women's group programs that are amenable to scale, particularly upon examination of impact evaluation results that report on efficacy or effectiveness. For example, diary studies are a promising qualitative method for increasing our understanding about fidelity of implementation among women's groups. Data from these studies provide important information on the processes that take place in the context of a women's group, particularly when data from surveys and diary studies are linked (for example, data could be merged into a single data set, ideally at the individual, household, or village level).

Triangulating quantitative data with qualitative tools can also help to assess whether and to what extent women's groups include elements that distinguish them from a nongroup platform, and the extent to which the inclusion of these elements changes behavior so that the women's groups achieve their desired outcomes. Five elements are of particular interest to the Bill & Melinda Gates Foundation: **resources** (shared or pooled risk, shared or pooled time, financial resources, and/or other resources); **networks and social capital** (new or shared social networks, group commitment and accountability mechanisms); **knowledge** (new or shared experiences, information, or knowledge); **agency** (critical consciousness around gender, agency, and norms); and **access and bargaining power** (new or additional access to markets, services, or political/social power through numbers and collective action).<sup>\*</sup> Although survey questions aimed at measuring group characteristics, functioning, and composition can provide information on whether (and to what extent) SHGs and SGs have been designed to include these elements, it is also critical to conduct in-depth qualitative research to assess the extent to which these elements are actually included in practice. Qualitative research can also help to examine how these elements act as mechanisms or pathways of change, contributing to the effectiveness of women's groups.

In this guide, we have tried to be as comprehensive as possible, without repeating generalized recommendations for evaluation or measurement described elsewhere. When looking at instruments, for example, we do not discuss the value of using a household roster, unique identifiers, or geo-coding. The guide also does not cover general survey or sampling strategies, respondent bias, field practice, and so on—including good practice related to implementation of gender-related surveys. As always, researchers will want to consider the trade-offs for different empirical models that are used to analyze data, including appropriate thresholds in their particular setting (as many of the questions produce categorical, rather than continuous, responses). This guide is not meant to inform general good practice in conducting evaluations or analysis, for which many other resources exist.

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<sup>\*</sup> The Bill & Melinda Gates Foundation considers the following five elements to be critical to the success of the women's groups it supports: (1) pooled savings and shared risks, (2) group solidarity and networks, (3) participatory learning and life skills, (4) critical consciousness of gender, and (5) access to markets and services.

## Theories of Change for Women's Groups

There is a wide diversity of women's group models, all with different theories of change. To measure women's empowerment and economic outcomes, we primarily focus on economic SHG programs and SGs and their respective theories of change.

### Economic Self-Help Group Programs

The theory of change for how economic SHG programs can improve women's empowerment and well-being operates through several mechanisms. First, community mobilizers can provide women with the opportunity to come together in groups, which can enable them to increase their social capital, as well as provide access to financial capital. While the specific forms of capital depend on the program design, SHGs commonly increase collective savings to facilitate intragroup lending; include weekly or monthly meetings, where women interact and network; and provide group support in the form of trainings and/or livelihood support. Exposure and access to financial and social resources can, in turn, enable women to experience an increase in asset ownership and income, if they employ the resources made available to them. Group support and the accumulation of social and financial capital may also enable women to expand and improve their life choices; change their patterns of spending and saving, or otherwise translate opportunities into action; and further their economic and political empowerment, as well as their mobility. Depending on levels of seclusion and social norms around women's claims to leisure time and friendships, social capital and support may be particularly pivotal in promoting women's intrinsic agency and "critical consciousness of gender." Carefully sequencing program components to first enable increases in social capital and agency may therefore be important to maximize the impact of SHGs on women's empowerment. Finally, women who develop skills to improve their livelihoods may be able to escape poverty traps in the medium to longer-term if they accumulate wealth from a low initial asset stock.<sup>19</sup>

SHG programs can also facilitate or provide women with access to social protection entitlements, which can result in synergies between the SHG and social protection programs. For example, the NRLM— which primarily focuses on savings, credit, and collective action through federations—aims to provide women with access to information on how to obtain job cards, enabling them to benefit from the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), the largest public works program in the world. Access to job cards can in turn provide opportunities for women to participate in nonagricultural labor markets. Further, even without direct linkages, women in SHGs may be better able to hold public entities accountable for public entitlements—leveraging both greater mobility, as well as social networks.<sup>20</sup> Economic SHGs may achieve similar benefits in Uganda or Nigeria through synergies with social protection programs. It is possible that providing access to jobs, cash transfers, or other entitlements could result in synergistic effects for economic SHGs and social protection programs, particularly when income is invested in the accumulation of wealth to escape poverty traps.

In households that engage in agricultural activities, SHGs may enable women to produce more high-value and diverse crops (bringing both income and nutritional returns), and to obtain



access to training, seeds, fertilizers, and other inputs (including labor) that can increase agricultural productivity. To the extent that SHGs can resolve credit constraints and obtain more favorable prices for members, households may be able to make investments that are higher risk but have higher returns. Depending on the nature of the group, women may also be better able to smooth consumption and income across agricultural seasons, particularly when “shocks” are specific to a household (e.g., health) rather than affecting an entire community (e.g., drought). Despite this promising potential, social norms may limit women’s meaningful participation in productive activities, which could result in lower overall impacts on outcomes like productivity or productive diversity.<sup>21</sup>

Economic SHGs can also trigger changes in prices and wages when they are implemented at scale. For example, the Bihar Rural Livelihoods Project (JEEVIKA) in the Indian state of Bihar resulted in a reduction in informal money lenders’ interest rates, possibly because of reduced demand for informal credit after gaining access to formal credit.<sup>22</sup> Changes in informal interest rates could result in increased opportunities for households that depend on informal credit. For example, landless households increased their asset ownership following the reduction in informal interest rates caused by the JEEVIKA program.<sup>23</sup>

## Savings Groups

SGs have a somewhat different implementation model from economic SHGs, with less focus on women’s empowerment and fewer linkages to formal financial institutions and social protection entitlements. However, they have an equally strong focus on financial inclusion, with a particular emphasis on the accumulation of savings, which women can use to increase their income and asset ownership, and potentially their empowerment.

Importantly, the positive effects of economic SHG programs and SGs may depend on factors such as the quality of implementation—for example, the ability of community mobilizers to bring together enough women, the effectiveness of group facilitators, the level of trust among group members, and the existence of institutional linkages between SHGs and social protection programs.

## Suggested Measurement Tools

Based on the theories of change, we discuss outcome measures for three domains: (1) empowerment outcomes; (2) economic outcomes (including consumption, poverty, assets, labor market participation or livelihoods; entrepreneurship; agriculture; savings and credit); and (3) group characteristics, functioning, and composition (including governance and social cohesion).

Table 1 provides an overview of each domain, with examples of key indicators, the level at which each indicator is measured, a description of the indicators, and recommended surveys or tools for the indicators noting that particular survey instruments vary in their frequency, sampling strategy, and how questions are phrased. Indicators and domains are not always exclusive—for example, women’s asset ownership (land or productive assets) could be considered part of the consumption, poverty, and assets domain or part of the agricultural domain. As a result,

different research efforts could classify or use indicators in different ways. In addition, some modules include both individual (woman) and household-level measures. In such cases, we present only one module, which links to multiple domains, rather than presenting individual or household measures separately into different sections. The remaining sections of this guide provide example instruments and links to additional information on analysis or indicator construction for the five different domains, as appropriate.

This guide also aims to provide some recommendations on standardized measures of women’s empowerment and economic outcomes to support comparisons across settings and a broad community of learning. However, the specifics of these outcomes will depend on contextual characteristics and additional, locally tailored measures of women’s empowerment and economic outcomes. For example, specific response options and recall periods may need to be tailored to the context and evaluation period; although many of the proposed indicators are standardized to a 12-month recall, this could be shortened to 6 months or another standardized unit depending on the evaluation timeline. In such cases, it is important to conduct a proper assessment of the expected utility of the indicator, including implications for the statistical power to detect effects.

Importantly, this document is intended to function as a “living guide” and will be updated with additional experience (e.g., testing of context-specific indicators) and new measures as they become available.

**Table 1. Suggested Indicators for Impact Evaluation**

Indicator or Dependent Variable	Unit of Measurement	Description	Useful Survey Tools	
<i>Measurement of Empowerment Outcomes: Tables A-1 Through A-8</i>				
<b>Women's Empowerment</b>	Women's psychological empowerment	Woman	Women's psychological empowerment index based on questions about self-efficacy	New General Self-Efficacy Scale
			Women's relative autonomy	Vignettes modeled after the Relative Autonomy index (RAI)
	Women's psychological well-being	Woman	Women's psychological well-being based on questions about emotional well-being	Quality of life index adapted from the WHO

Indicator or Dependent Variable		Unit of Measurement	Description	Useful Survey Tools
Women's Empowerment (continued)	Women's economic empowerment	Woman and man	Women's economic empowerment index based on questions about decision-making over economic resources in the household	Women's Empowerment in Agriculture Index
	Women's ability to engage in collective action	Woman	Index based on questions about ability to engage in collective action when incidents happen	Social Observatory Questionnaires
	Women's social support	Woman	Index based on questions about the quality and quantity of support women receive from friends, family, and significant others	Multidimensional Scale of Perceived Social Support
	Women's mobility	Woman and man	Women's mobility index based on questions about mobility outside the household	Project-level Women's Empowerment in Agriculture Index (pro-WEAI)

**Measurement of Economic Outcomes: Tables B-1 Through B-23**

Credit/Savings	Formal credit	Woman and household	Total value (\$) of formal credit (including self-help groups, banks, microfinance institutions, etc.)	Social Observatory Questionnaires
	Informal credit	Woman and household	Total value (\$) of informal credit (including informal money lenders, friends, family, etc.)	Social Observatory Questionnaires
	Access to formal credit	Woman and household	Indicator of ability of woman to obtain formal credit based on questions about beliefs about access to credit	Social Observatory Questionnaires
	Savings from groups	Woman and household	Total value (\$) of savings of woman and household from groups	Social Observatory Questionnaires
	Other savings	Woman and household	Total value (\$) of other savings of woman and household	Social Observatory Questionnaires

Indicator or Dependent Variable		Unit of Measurement	Description	Useful Survey Tools
Consumption/Poverty/Assets/Labor Market Participation/ Livelihoods	Women's and men's asset ownership	Woman and man	Asset indicators based on questions about individual-level asset ownership	Women's Empowerment in Agriculture Index
	Total household consumption	Household	Total value (\$) of consumption (including value of gifts and own production consumed), classification of poor or extreme-poor as per national poverty lines	National expenditure surveys
	Poverty measures	Household	Index based on poverty scorecard	Poverty scorecards
	Household-level asset ownership	Household	Asset indicators based on questions about household-level asset ownership	Women's Empowerment in Agriculture Index
	Time in productive and reproductive work	Woman and man	Time in productive and reproductive work, based on 24-hour recall	Women's Empowerment in Agriculture Index
	Income	Woman	Self-reported labor income	Enterprises for Ultra Poor Women after War Survey
	Business income	Woman	Self-reported business income	Sri Lanka Female Enterprise Survey
Agriculture	Use of improved seed and other inputs	Household	Self-reported use of seed, fertilizers, etc.	NSSO SAAHH and HCE, 50 X 2030 agricultural survey
	More crop diversification	Household	Crops grown	NSSO SAAHH and HCE, 50 X 2030 Agricultural Survey
	Production of high-valued crops and commercialization	Household	Self-reported production and sales of high-productivity crops	NSSO SAAHH and HCE, 50 X 2030 Agricultural survey
	Agricultural productivity	Household	Total value (\$) of agricultural production per hectare	NSSO SAAHH and HCE, 50 X 2030 Agricultural Survey
	Consumption smoothing	Household	Changes in per capita consumption over time	National expenditure surveys

Indicator or Dependent Variable	Unit of Measurement	Description	Useful Survey Tools	
<b>Measurement of Group Characteristics, Composition, and Functioning: Tables C-1 Through C-5</b>				
<b>Governance and Social Cohesion</b>	Fidelity of implementation and group governance	Women's group	Index for quality of fidelity of implementation and group governance based on questions about rotational leadership, regular meetings, recording of meeting agreements, and group-based decision making	Questionnaire based on survey tools developed for impact evaluation of NRLM by 3ie
	Social cohesion index	Women's group	Index for social cohesion in the group	Tool developed by Population Council

### A. Measurement of Women's Empowerment

In line with Kabeer (p. 435),<sup>24</sup> we define women's empowerment as *"the process by which those who have been denied the ability to make strategic life choices acquire such an ability."* In other words, empowerment is the dynamic process through which resources enable women to have agency to make decisions, enabling them to achieve favorable outcomes for themselves and their families. Many studies have relied on this definition. As shown in Table 1, empowerment indicators include woman's psychological empowerment, psychological well-being, economic empowerment, ability to engage in collective action, social support, and mobility. To provide common measures of women's empowerment, we include modules from the Women's Empowerment in Agriculture Index (WEAI) and impact evaluations conducted by the Social Observatory of the World Bank.<sup>25,26,27</sup>

In rural areas, where the large majority of women's groups operate, adaptations of the WEAI for comparing empowerment outcomes between men and women have proved effective,<sup>28,29</sup> including the "abbreviated" version (a-WEAI) and the "project" version (pro-WEAI). The WEAI was originally developed to track and measure women's inclusion in agriculture and gender equality within the United States Agency for International Development's (USAID) Feed the Future initiative, but it has since been revised to meet various objectives, including program evaluation, and is currently being used or adapted in over 50 countries.<sup>30,31</sup> While standard empowerment modules administered within household surveys do not allow for true intra-household comparisons (because they are only administered to women), the WEAI enables these comparisons by administering a survey about empowerment to both men and women.

A promising practice for evaluating SHGs is to combine components of the WEAI with survey modules from impact evaluations conducted by the Social Observatory of the World Bank. While the WEAI is considered best practice for measuring women's empowerment in rural areas (and

is focused on linkages to agriculture), the surveys from the Social Observatory are explicitly designed to measure the impact of economic SHGs. As an example, Tables A-1 and A-2 present survey questions for measuring women’s economic empowerment based on the pro-WEAI. Across a range of 12 productive and economic activities, these questions capture the extent to which women participate in activities and decisions (around both the activity and the income expenditure related to each activity), as well as women’s perceived ability to influence decisions or access information, if they so wish.

On a project-by-project basis, evaluators may choose to tailor activities to the evaluation sample/setting, including asking more questions about personal activities (rather than productive activities) or asking an abbreviated set of questions. Typically, these measures are analyzed in a comparative manner (e.g., primary female in relation to primary male in the same household<sup>†</sup>) by summing responses across activities and analyzing either a score or a threshold. For example, in the traditional pro-WEAI indicator construction, a woman is scored as having “adequate” empowerment if she meets at least one of the following criteria for all activities in which she participates: (1) she makes the decision by herself, (2) she makes it jointly and has at least some input into the decision, or (3) she feels she could make the decision if she wanted to (at least to a medium extent). This type of scoring allows women to share responsibilities or engage in collaborative decision making with other household members without conceptualizing or scoring these sorts of dynamics as disempowered. Further information about the traditional pro-WEAI scoring can be found in Malapit et al.<sup>32</sup> and on the [WEAI resource center website](#) (including Stata do-files for indicator construction and analysis).

Table A-2 provides an alternate methodology for triangulating or capturing autonomy in decision making, using story vignettes that provide context on women’s motivations for making certain decisions. Vignettes describe a fictional scenario, event, or happening and are typically used to determine how people make judgments and decisions about sensitive topics. This model was developed as an alternative format of collecting indicators of relative autonomy. This concept is traditionally measured via the Relative Autonomy Index, which is meant to capture whether a woman is motivated by her own values, rather than by outside coercion or fear of disapproval.<sup>33,34</sup> In the pro-WEAI, the module is scored as the sum of three vignettes, where each response is given a score ranging from -2 on question 2 (where a woman makes a decision because “someone else says she must”) to 3 on question 4 (where a woman makes a decision because “she personally wants to”).<sup>35</sup> As this measure includes concepts of intrinsic motivation and a woman’s own agency to act, these indicators can also be classified under women’s psychological empowerment.

Table A-3 presents survey questions for measuring a woman’s ability to engage in collective action, using four different scenarios. The questions ask women if they would approach someone for help to deal with an issue that was too large to solve on their own. If so, it asks

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<sup>†</sup> According to the WEAI instructional guide, the male/female “*primary and secondary respondents* are those who are *self-identified* as the primary members responsible for decisionmaking, both social and economic, within the household. They are usually husband and wife; however, they can also be other members as long as there is one male and one female aged 18 and over. For example, one might find a widowed mother and her adult son as the primary female and male respondents.” For more information, see [https://www.ifpri.org/sites/default/files/Basic%20Page/weai\\_instructionalguide\\_1.pdf](https://www.ifpri.org/sites/default/files/Basic%20Page/weai_instructionalguide_1.pdf).

them to list the people they would approach (multiple options allowed). The measures of ability to engage in collective action were adapted from evaluations conducted by the Social Observatory in Bihar, India.<sup>36</sup> Hoffman and colleagues constructed a binary indicator with 1 equal to a woman reporting in any scenario that she would intervene, and 0 otherwise. Researchers might consider creating more nuanced indicators—for example, counting the number of times a woman would intervene over a specified time period, or counting the total number of different groups with whom a woman felt it was possible to engage.

Table A-4 gives an example of a social support module, based on the Multidimensional Scale of Perceived Social Support (MSPSS). The MSPSS includes 14 questions, consists of three subscales (family, friends, and significant other), and measures both the existence and quality of social support received from different sources. Calculating the “significant other subscale” requires summing across questions 1, 2, 5, and 10 and dividing by 4, while the family subscale consists of the sum of questions 3, 4, 8, and 11 divided by 4, and the friends subscale is calculated by summing across questions 6, 7, 9, and 12 divided by 4.<sup>37</sup> The MSPSS has been translated into numerous languages, and scoring and other documentation are [publicly available](#). Promising adaptations for LMICs include simplification of response scales (for example, using a four-point scale instead of a five-point scale).

To measure women’s mobility, there is a short set of survey questions from the Indian National Family Health Survey, as well as a longer alternative from the pro-WEAI, which we include in Table A-5. The Indian National Family Health Survey asks respondents the following question: *“Are you usually allowed to go to the following places alone, only with someone else, or not at all: (a) to the market, (b) to the health facility, and (c) to places outside this village/community?”* Indicators on restricted mobility can be created if a woman answers that she is not allowed to go somewhere, or that she can only go with someone else. A more detailed alternative from the pro-WEAI includes questions about nine different locations (customizable by evaluation). In each instance, questions are asked about how often a woman goes to a certain location, who decides whether she can go, whether anyone objects to her going, and under what circumstances she would be limited in going. In the pro-WEAI scoring, a woman’s mobility is considered “adequate” if she goes to at least two locations at least once a week (to the city, to the market, or to visit family) or if she goes to at least one location at least once a month (to a health facility or a public meeting). More nuanced scoring would include limitations in mobility, as well as actual behavior. The mobility domain is more relevant to women’s empowerment in contexts where female seclusion norms are present, such as South Asia and northern Nigeria.

When measuring psychological empowerment, one promising approach may be to measure indicators related to self-efficacy (an individual’s self-belief and ability to succeed and achieve goals). Self-efficacy is included as one of the measures of intrinsic agency, or “power within,” in the pro-WEAI.<sup>38</sup> Table A-6 includes survey questions that use the new, eight-item, validated general efficacy scale,<sup>39</sup> which asks respondents to reply to statements using a five-point Likert scale. It is recommended that researchers analyze the resulting data using principal component analysis (a data reduction technique) to create a general efficacy score. Note that in the pro-WEAI, Malapit et al. (2019)<sup>40</sup> consider a woman’s self-efficacy to be “adequate” if she responds with “agree” or “strongly agree” on average across questions. While the new general efficacy scale is widely used, there are many other important concepts within psychological

empowerment which are not yet measured in a standardized way. For example, critical consciousness, or one's awareness of ability to make choices, or take action has important implications for gender—as without consciousness of gender unequal norms, actions taken with agency may reinforce, rather than reverse them. Despite widespread use of this concept in research across fields, the application to women's empowerment in international research is recent.<sup>41, 42</sup> We therefore do not present guidance on the measurement of critical consciousness in this version of the guide, but we believe it is an important area for future measurement innovation.

Alongside psychological empowerment, we include measures of psychological well-being in Table A-7, operationalized through quality-of-life (QoL) scales adapted from the World Health Organization (WHO). These QoL questions are drawn from the Satisfaction With Life Scale (SWLS)<sup>43</sup> and the WHO's Quality of Life Scale (WHOQOLS).<sup>44</sup> The first five questions are taken from the SWLS, which is narrowly focused on an individual's overall life satisfaction. The SWLS has shown good internal consistency and construct validity.<sup>45</sup> The last three questions come from the WHOQOLS and cover positive affect as well as overall QoL. Following Kilburn, Handa, Angeles, Tsoka, and Mvula (2018),<sup>46</sup> we suggest developing a summary index measure for QoL with a resulting scale that ranges from 8 to 40, where higher scores reflect greater QoL (authors find high internal validity of the score, with a Cronbach's  $\alpha$  score of 0.83). This is intended to be a broad measure of QoL, incorporating positive affect and life satisfaction questions in order to capture individuals' perceptions of well-being across various concepts. Factor analysis of the score reveals a single construct, consistent with the literature on life satisfaction scales.<sup>47</sup>

Finally, for context-specific measures of women's empowerment, several researchers have created questions related to hypothetical situations in a vignette.<sup>48,49</sup> Using vignettes can help to ground a hypothetical question to specific life events that respondents may better relate to and understand and relate to. In addition, vignettes can reduce the likelihood of courtesy and social acceptability bias<sup>‡,50</sup> and lead to more reliable measures of empowerment.<sup>51</sup> To develop these vignettes, it is critical to conduct formative research to better understand the local context and identify the most appropriate administration modality. This formative research can also guide the development of an intervention-specific theory of change, as discussed in the Abdul Latif Jameel Poverty Action Lab's (J-PAL) practical guide to measuring women's and girls' empowerment.<sup>52</sup> Table A-8 presents two examples of locally tailored survey questions, based on J-PAL's practical guide and Masset's (2015) study.<sup>53</sup>

To further the resources we share here, evaluators and program staff may find other sources of aggregated measurement options useful, including the following notable examples:

- [Evidence-Based Measures of Empowerment for Research on Gender Equality \(EMERGE\)](#): EMERGE is an initiative based at the University of San Diego, California, that focuses on measuring equality and empowerment for monitoring and evaluation purposes in India. A Web platform aggregates tools into nine searchable domains, where each tool is scored based on rigor, including reliability and validity, measurement

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‡ Courtesy bias refers to a situation where the respondent gives an answer that he or she feels the interviewer wants to hear. Social acceptability bias refers to a situation where the respondent gives an answer that he or she believes is considered the socially correct response. Self-reported data on preferences, attitudes, and behavior tend to suffer from courtesy and social acceptability bias (White & Phillips, 2012).



psychometrics, and use of formative research. EMERGE has developed several guidelines ([Report 1](#), [Report 2](#), [Project Report](#)).

- [JPAL’s Practical Guide to Measuring Women’s and Girls’ Empowerment in Impact Evaluations](#): This guide, published in 2018, distills lessons and insights from the experience of JPAL-affiliated researchers (based at the Massachusetts Institute of Technology) on how to measure empowerment within impact evaluations. The guide includes two appendices that provide examples of survey questions ([Appendix 1](#)) and examples of non-survey instruments ([Appendix 2](#)). In addition to examples of empowerment measures, the JPAL guide includes sections on survey best practices which can be applied to any evaluation in LMICs.
- The Population Council’s [Gender and Power Metrics](#): Released in 2019, this is a living database of more than 600 unique scales that have been used globally to measure concepts of gender, agency, power, and control. The database is searchable and includes filters to allow researchers to identify and export data for specific search criteria (including citations for validations and use). In addition to scales for measuring women’s empowerment, the database includes broader measures that are relevant for evaluations, including measures of gendered social norms and attitudes.
- The International Food Policy Research Center’s [Women’s Empowerment in Agriculture Index Resource Center](#): Numerous instruments included in this guide draw on various versions of WEAI modules. This resource center aggregates tools, publications, datasets and other helpful products, including training videos and webinars.
- The Small Enterprise, Education and Promotion (SEEP) Network’s [Women’s Empowerment and Savings Groups: Monitoring and Results Measurement Toolkit](#): Developed by Nathan Associates and released in 2019, this document focuses on measuring women’s empowerment within SGs more holistically. It aims to provide a reference point for best practices, useful examples, and practical tools that can be considered and adapted based on needs and context.

It is important to pre-specify empowerment indices based on a clearly documented and evidence-based theory of change. This is helpful for comparability. It also helps to avoid the temptation to select results ad hoc. To create these indices, we recommend pre-specifying the components of women’s empowerment—for instance, using some of the examples in the survey modules we have just discussed in this guide. Empowerment components are posited to be latent constructs. Because they cannot be directly measured, their existence must be demonstrated through the accumulation of supporting behavioral or performance evidence. For example, as previously mentioned, principal component analysis can be used to determine the number of distinct dimensions or constructs (also referred to as *factors*) that theoretically underlie women’s empowerment as measured by a survey instrument.<sup>54</sup> Principal component analysis also allows for validating the measurement of women’s empowerment by examining whether the factor structure is different across contexts.<sup>55</sup> Ultimately, however, the importance of specific components of women’s empowerment will depend on the program-specific theory of change and will be informed by formative work in the evaluation setting.

**Table A-1. Survey Questions Related to the Measurement of Women’s Economic Empowerment, With Respect to Labor and Financial Activities**

<p><b>READ:</b> Now I’d like to ask you some questions about your participation in certain types of work activities and on making decisions on various aspects of household life.</p>		<p>Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?</p>	<p>When decisions are made regarding [ACTIVITY], who is it that normally takes the decision?  <b>ENTER UP TO 3 MEMBER IDs IF RESPONSE IS MEMBER ID (SELF) ONLY → G2.05</b>  <b>OTHER CODES:</b>                      NON-HH MEMBER.....94                      NOT APPLICABLE.....98 → <b>NEXT ACTIVITY</b></p>			<p>How much input did you have in making decisions about [ACTIVITY]?  <b>USE CODE G2 ↓</b></p>	<p>To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to?  <b>USE CODE G1</b></p>	<p>To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]?  <b>USE CODE G1</b></p>	<p>How much input did you have in decisions about how much of the outputs of [ACTIVITY] to keep for consumption at home rather than selling?  <b>USE CODE G2 ↓</b></p>	<p>How much input did you have in decisions about how to use income generated from [ACTIVITY]?  <b>USE CODE G2 ↓</b></p>
<b>ACTIVITY</b>		<b>G2.01</b>	<b>G2.02</b>			<b>G2.03</b>	<b>G2.04</b>	<b>G2.05</b>	<b>G2.06</b>	<b>G2.07</b>
			<b>ID #1</b>	<b>ID #2</b>	<b>ID #3</b>					
<b>A</b>	Staple grain farming and processing of the harvest: grains that are grown primarily for food consumption (rice, maize, wheat, millet)	YES.....1 NO.....2 → ACTIVITY B					<p><b>CODE G1:</b>                      Not at all.....1                      Small extent.....2                      Medium extent.....3                      To a high extent.....4</p>		<p><b>CODE G2:</b>                      Little to no input in decisions..... 1                      Input into some decisions..... 2                      Input into all or most decisions.. 3                      Not applicable/no decision made ..... 98</p>	
<b>B</b>	Horticultural (gardens) or high-value crop farming and processing of the harvest	YES.....1 NO.....2 → ACTIVITY C								
<b>C</b>	Large livestock raising (cattle, buffaloes) and processing of milk and/or meat	YES.....1 NO.....2 → ACTIVITY D								
<b>D</b>	Small livestock raising (sheep, goats, pigs) and processing of milk and/or meat	YES.....1 NO.....2 → ACTIVITY E								
<b>E</b>	Poultry and other small animal raising (chickens, ducks, turkeys) and processing of eggs and/or meat	YES.....1 NO.....2 → ACTIVITY F								
<b>F</b>	Fishpond culture	YES.....1 NO.....2 → ACTIVITY G								
<b>G</b>	Non-farm economic activities (running a small business, self-employment, buy-and-sell)	YES.....1 NO.....2 → ACTIVITY H								
<b>H</b>	Wage and salary employment (work that is paid for in cash or in kind, including both agriculture and other wage work)	YES.....1 NO.....2 → ACTIVITY I								

<b>READ:</b> Now I'd like to ask you some questions about your participation in certain types of work activities and on making decisions on various aspects of household life.		Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?	When decisions are made regarding [ACTIVITY], who is it that normally takes the decision? <b>ENTER UP TO 3 MEMBER IDs IF RESPONSE IS MEMBER ID (SELF) ONLY → G2.05</b> <b>OTHER CODES:</b> NON-HH MEMBER.....94 NOT APPLICABLE.....98 → <b>NEXT ACTIVITY</b>	How much input did you have in making decisions about [ACTIVITY]? <b>USE CODE G2 ↓</b>	To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to? <b>USE CODE G1</b>	To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]? <b>USE CODE G1</b>	How much input did you have in decisions about the outputs of [ACTIVITY] to keep for consumption at home rather than selling? <b>USE CODE G2 ↓</b>	How much input did you have in decisions about how to use income generated from [ACTIVITY]? <b>USE CODE G2 ↓</b>
<b>I</b>	Large, occasional household purchases (bicycles, land, transport vehicles)	YES.....1 NO.....2 → ACTIVITY J						
<b>J</b>	Routine household purchases (food for daily consumption or other household needs)	YES.....1 NO.....2 → ACTIVITY K						
<b>K</b>	Borrowing for family	YES.....1 NO.....2 → ACTIVITY L						
<b>L</b>	Saving for family	YES.....1 NO.....2						

*Note:* To implement the abbreviated version of the WEAI, instruments can include G02.01, G02.03, and G02.07 only.

*Source:* Women's Empowerment in Agriculture Index, program version (pro-WEAI)<sup>56</sup>

**Table A-2. Alternate Survey Questions Related to the Measurement of Women’s Economic Empowerment, With Respect to Motivations for Economic Choices**

Ideally, these decision-making categories would align fully with the activities in Table A-1. However, the pro-WEAI only collects data for the three most important decision categories.

<p><b>READ:</b> Now I am going to read you some stories about different farmers and their situations regarding different agricultural activities. This question format is different from the rest, so take your time in answering. For each story, I will then ask you how much you are like or not like each of these people. We would like to know if you are completely different from them, similar to them, or somewhere in between. There are no right or wrong answers to these questions.</p> <p><b>READ ALOUD EACH STORY, SUBSEQUENT QUESTIONS, AND RESPONSE CHOICE. NAMES SHOULD BE ADOPTED TO LOCAL CONTEXT AND BE MALE/FEMALE DEPENDING ON THE SEX OF THE RESPONDENT. THE ORDER OF TOPICS A–D SHOULD BE RANDOMIZED, AND WITHIN EACH TOPIC, THE ORDER OF STORIES 1–4 SHOULD BE RANDOMIZED.</b></p>		Are you like this person? <b>CIRCLE ONE</b>	Are you completely the same or somewhat the same? <b>CIRCLE ONE</b>	Are you completely different or somewhat different? <b>CIRCLE ONE</b>	
<b>STORY</b>		<b>G8.01</b>	<b>G8.02</b>	<b>G8.03</b>	
The types of crops to grow or raise for consumption and sale in market	<b>A1</b>	“PERSON’S NAME cannot grow other types of crops here for consumption and sale in market. Beans, sweet potato, and maize are the only crops that grow here.”	YES...1 NO.....2 → <b>G8.03</b>	COMPLETELY THE SAME.... 1 → <b>NEXT QUESTION</b> SOMEWHAT THE SAME..... 2 → <b>NEXT QUESTION</b>	COMPLETELY DIFFERENT ..... 1 SOMEWHAT DIFFERENT ..... 2
	<b>A2</b>	“PERSON’S NAME is a farmer and grows beans, sweet potato, and maize because her spouse, or another person or group in her community, tells her she must grow these crops. She does what they tell her to do.”	YES...1 NO.....2 → <b>G8.03</b>		
	<b>A3</b>	“PERSON’S NAME grows the crops for agricultural production that her family or community expect. She wants them to approve of her as a good farmer.”	YES...1 NO.....2 → <b>G8.03</b>		
	<b>A4</b>	“PERSON’S NAME chooses the crops that she personally wants to grow for consumption and sale in market and thinks are best for herself and her family. She values growing these crops. If she changed her mind, she could act differently.”	YES...1 NO.....2 → <b>G8.03</b>		
Livestock raising	<b>B1</b>	“PERSON’S NAME cannot raise any livestock other than what she has. These are all that do well here.”	YES...1 NO.....2 → <b>G8.03</b>	COMPLETELY THE SAME.... 1 → <b>NEXT QUESTION</b> SOMEWHAT THE SAME..... 2 → <b>NEXT QUESTION</b>	COMPLETELY DIFFERENT ..... 1 SOMEWHAT DIFFERENT ..... 2
	<b>B2</b>	“PERSON’S NAME raises the types of livestock she does because her spouse, or another person or group in her community, tells her she must use these breeds. She does what they tell her to do.”	YES...1 NO.....2 → <b>G8.03</b>		
	<b>B3</b>	“PERSON’S NAME raises the kinds of livestock that her family or community expect. She wants them to approve of her as a good livestock raiser.”	YES...1 NO.....2 → <b>G8.03</b>		
	<b>B4</b>	“PERSON’S NAME chooses the types of livestock that she personally wants to raise and thinks are good for herself and her family. She values raising these types. If she changed her mind, she could act differently.”	YES...1 NO.....2 → <b>G8.03</b>		
Taking crops or livestock (incl. eggs or milk) to the market	<b>C1</b>	“There is no alternative to how much or how little of her crops or livestock [PERSON’S NAME] can take to the market. She is taking the only possible amount.”	YES...1 NO.....2 → <b>G8.03</b>	COMPLETELY THE SAME.... 1 → <b>NEXT QUESTION</b>	COMPLETELY DIFFERENT ..... 1 SOMEWHAT DIFFERENT ..... 2
	<b>C2</b>	“PERSON’S NAME takes crops and livestock to the market because her spouse, or another person or group in her community, tells her she must sell them there. She does what they tell her to do.”	YES...1 NO.....2 → <b>G8.03</b>		

	<b>C3</b>	<i>"[PERSON'S NAME] takes the crops and livestock to the market that her family or community expect. She wants them to approve of her."</i>	YES...1 NO.....2 → <b>G8.03</b>	SOMEWHAT THE SAME..... 2 → <b>NEXT QUESTION</b>	
	<b>C4</b>	<i>"[PERSON'S NAME] chooses to take the crops and livestock to market that she personally wants to sell there, and thinks are best for herself and her family. She values this approach to sales. If she changed her mind, she could act differently."</i>	YES...1 NO.....2 → <b>G8.03</b>		
How to use income generated from agricultural and non-agricultural activities	<b>D1</b>	<i>"There is no alternative to how [PERSON'S NAME] uses her income. How she uses her income is determined by necessity."</i>	YES...1 NO.....2 → <b>G8.03</b>	COMPLETELY THE SAME.... 1 → <b>NEXT QUESTION</b> SOMEWHAT THE SAME..... 2 → <b>NEXT QUESTION</b>	COMPLETELY DIFFERENT ..... 1 SOMEWHAT DIFFERENT ..... 2
	<b>D2</b>	<i>"[PERSON'S NAME] uses her income how her spouse, or another person or group in her community, tells her she must use it there. She does what they tell her to do."</i>	YES...1 NO.....2 → <b>G8.03</b>		
	<b>D3</b>	<i>"[PERSON'S NAME] uses her income in the way that her family or community expects. She wants them to approve of her."</i>	YES...1 NO.....2 → <b>G8.03</b>		
	<b>D4</b>	<i>"[PERSON'S NAME] chooses to use her income how she personally wants to, and thinks is best for herself and her family. She values using her income in this way. If she changed her mind, she could act differently."</i>	YES...1 NO.....2 → <b>G8.03</b>		
	<b>D5</b>	<i>"[PERSON'S NAME] chooses to save how she personally wants to, and thinks is best for herself and her family. She values saving in this way. If she changed her mind, she could act differently."</i>	YES...1 NO.....2 → <b>G8.04</b>		
	<b>D6</b>	<i>"[PERSON'S NAME] chooses to borrow how she personally wants to, and thinks is best for herself and her family. She values borrowing in this way. If she changed her mind, she could act differently."</i>	YES...1 NO.....2 → <b>G8.05</b>		

Source: Women's Empowerment in Agriculture Index, program version (pro-WEAI)<sup>57</sup>

**Table A-3. Survey Questions to Measure the Ability to Engage in Collective Action**

<p><b>READ:</b> Various incidents may happen in your community which may or may not affect you. I would like to know what you would do if such incidents happen. [Incidents should be locally adapted as necessary]</p>		<p>Suppose that [READ INCIDENT]. You want to do something, but the problem is so large that you alone cannot solve it. Would you approach anyone to help you deal with the problem?</p>	<p>Who will you approach for any help with incident? [Mark all that apply]</p>
<b>INCIDENT</b>		<b>A03.1</b>	<b>A03.2</b>
<b>A</b>	A woman you are friends with in your community is being beaten up by her husband	1=Yes 2=No	1=Deal with it myself, help not needed 2=Approach husband 3=Approach other family (extended family) members 4=Approach other women 5=Approach village leaders (Mukhiya in India) 6=Approach social or women's welfare workers 7=Other, specify
<b>B</b>	Village school is not functioning properly	1=Yes 2=No	1=Deal with it myself, help not needed 2=Approach husband 3=Approach other family (extended family) members 4=Approach other women 5=Approach village leaders (Mukhiya in India) 6=Approach teachers or school staff 7=Other, specify
<b>C</b>	Village health center is not functioning properly	1=Yes 2=No	1=Deal with it myself, help not needed 2=Approach husband 3=Approach other family (extended family) members 4=Approach other women 5=Approach village leaders (Mukhiya in India) 6=Approach health facility staff 7=Other, specify
<b>D</b>	Village leaders (Mukhiya in India) are not doing their work properly	1=Yes 2=No	1=Deal with it myself, help not needed 2=Approach husband 3=Approach other family (extended family) members 4=Approach other women 5=Approach other village leaders 6=Approach officials / leaders outside the village 7=Other, specify

Source: Social Observatory, World Bank (adapted), used in Hoffman et al.<sup>58</sup>

**Table A-4. Survey Questions Related to Social Networks and Support**

<b>READ:</b> You may face ups and downs in your life, good times and hard times. We are interested in knowing about different people you may rely on and spend time with both in good times and hard times. After I read each statement, please tell me how much you agree or disagree with the statement on a scale of 1 to 5, where 1 means you “strongly disagree” and 5 means you “strongly agree.” [show visual cue card] <b>(Note for CAPI: Randomize order of statements if possible)</b>			
1	There is a special person [significant other] who is around when I am in need	1 = Strongly disagree 2 = Disagree 3 = Neither agree or disagree 4 = Agree 5 = Strongly agree	
2	There is a special person [significant other] with whom I can share joys and sorrows		
3	My family really tries to help me		
4	I get the emotional help and support I need from my family		
5	I have a special person [significant other] who is a real source of comfort to me		
6	My friends really try to help me		
7	I can count on my friends when things go wrong		
8	I can talk about my problems with my family		
9	I have friends with whom I can share my joys and sorrows		
10	There is a special person in my life [significant other] who cares about my feelings		
11	My family is willing to help me make decisions		
12	I can talk about my problems with my friends		
13	All together, how many friends do you have that you are regularly in touch with?		
14	All together, how many family members do you have who you are regularly in touch with?		

Source: Multidimensional Scale of Perceived Social Support (MSPSS)<sup>59,60</sup>

**Table A-5. Survey Questions Related to Women’s Mobility**

QUESTION				RESPONSE FOR G6.01 through G6.06: USE CODE ↓						
G6.01 How often do you visit an urban center?				1 = EVERY DAY 2 = AT LEAST ONCE EVERY WEEK 3 = AT LEAST ONCE EVERY TWO WEEKS 4 = AT LEAST ONCE EVERY MONTH 5 = LESS THAN ONCE A MONTH 6 = NEVER						
G6.02 How often do you go to the market / haat / bazaar?										
G6.03 How often do you go to visit family or relatives?										
G6.04 How often do you go to visit a friend / neighbor’s house?										
G6.05 How often do you go to the hospital / clinic / doctor (seek health service)?										
G6.06 How often do you go to a public village gathering / community meeting / training for NGO or other programs?										
<b>READ:</b> Now I’d like to ask you some questions about different places you might visit.		Who usually decides whether you can go to [PLACE]? <b>ENTER UP TO 3 MEMBER IDs IF RESPONSE IS MEMBER ID (SELF) ONLY → NEXT PLACE</b> <b>OTHER CODES:</b> NON-HH MEMBER.....94 NOT APPLICABLE.....98		Does your husband/partner or other household member object to you going <u>alone</u> to [PLACE]?		Under what circumstances would this person <u>NOT</u> object to your going to [PLACE] alone?  <b>CIRCLE ALL APPLICABLE</b>		Do these objections prevent you from going <u>alone</u> to [PLACE]?		
		<b>G6.09</b>								
<b>PLACE</b>		<b>ID #1</b>	<b>ID #2</b>	<b>ID #3</b>	<b>G6.10</b>	<b>G6.11</b>		<b>G6.12</b>		
A	Urban center				YES.....1 NO.....2 → PLACE B	1 = If I have company (relatives, children, etc.)		YES.....1 NO.....2		

B	Market / haat / bazaar				YES.....1 NO.....2 → PLACE C	2 = If I can arrange my own expenses (for transport) 3 = If I follow purdah / dress acceptably 4 = Other, specify 5 = Under no circumstances would I be allowed to go → NEXT PLACE	YES.....1 NO.....2
C	Visit family or relatives				YES.....1 NO.....2 → PLACE D		YES.....1 NO.....2
D	Visit a friend / neighbor's house				YES.....1 NO.....2 → PLACE E		YES.....1 NO.....2
E	Hospital / clinic / doctor (seek health service)				YES.....1 NO.....2 → PLACE F		YES.....1 NO.....2
F	Temple / church / mosque				YES.....1 NO.....2 → PLACE G		YES.....1 NO.....2
G	Public village gathering or community meeting				YES.....1 NO.....2 → PLACE H		YES.....1 NO.....2
H	Training for NGO / other programs				YES.....1 NO.....2 → PLACE I		YES.....1 NO.....2
I	Outside your community or village				YES.....1 NO.....2 → MODULE G7		YES.....1 NO.....2

Source: Women's Empowerment in Agriculture Index, program version (pro-WEAI)<sup>61</sup>



**Table A-6. Survey Questions Related to Self-Efficacy**

<b>READ:</b> Now I'm going to ask you some questions about different feelings you might have. Please listen to each of the following statements. Think about how each statement relates to your life, and then tell me how much you agree or disagree with the statement on a scale of 1 to 5, where 1 means you "strongly disagree" and 5 means you "strongly agree." [show visual cue card] ( <b>Note for CAPI: Randomize order of statements if possible</b> )			
1	I will be able to achieve most of the goals that I have set for myself.	1 = Strongly disagree 2 = Disagree 3 = Neither agree or disagree 4 = Agree 5 = Strongly agree	
2	When facing difficult tasks, I am certain that I will accomplish them.		
3	In general, I think that I can obtain outcomes that are important to me.		
4	I believe I can succeed at most any endeavor to which I set my mind.		
5	I will be able to successfully overcome many challenges.		
6	I am confident that I can perform effectively on many different tasks.		
7	Compared to other people, I can do most tasks very well.		
8	Even when things are tough, I can perform quite well.		

Source: Women's Empowerment in Agriculture Index, program version (pro-WEAI),<sup>62</sup> and New General Self-Efficacy Scale<sup>63</sup>

**Table A-7. Survey Questions Related to Quality of Life**

<b>READ:</b> I am going to read you a series of statements about your life. Please tell me the extent to which you agree or disagree for your own personal situation. Think about how each statement relates to your life, and then tell me how much you agree or disagree with the statement on a scale of 1 to 5, where 1 means you "strongly disagree" and 5 means you "strongly agree." [show visual cue card] ( <b>Note for CAPI: Randomize order of statements if possible</b> )			
1	In most ways, my life is close to ideal	1 = Strongly disagree 2 = Disagree 3 = Neither agree or disagree 4 = Agree 5 = Strongly agree	
2	The conditions in my life are excellent		
3	I am satisfied with my life		
4	So far, I have gotten the important things I want in life		
5	If I could live my life over, I would change almost nothing		
6	I feel positive about my future		
7	I generally feel happy		
8	I am satisfied with my health		

Source: Satisfaction With Life Scale (SWLS)<sup>64</sup> and World Health Organization (WHO) Quality of Life Scale<sup>65</sup>

**Table A-8. Locally Tailored Survey Questions to Measure Women's Empowerment**

<b>READ:</b> I am going to give you some statements with which you might or might not agree. You might have several reasons for agreeing or disagreeing with the statement, and there is no right or wrong answer. Please tell me whether you agree or disagree:		
<b>STORY</b>		<b>A8.01</b>
<b>A</b>	Pooja, a 21-year-old girl belongs to a village in Haryana. Since childhood, she has aspirations of becoming a police officer. After graduating from college, she appears for the Haryana police examination and is offered a job as a police officer. Her parents are worried about her job as they think that is not suitable for a woman. They also believe that it is her age to get married and they have found a prospective groom for her from a good family. Pooja, however, wants to take up the job, and does not wish to get married. According to her parents, Pooja would not need to work after she gets married, as her husband will take care of her. Pooja should instead focus on household work, help out her mother in law, and eventually have children. Finally, her parents decide that instead of taking the job, she should get married. Do you agree with the parents' decision?	1=Agree 2=Disagree

<b>READ:</b> I am going to give you some statements with which you might or might not agree. You might have several reasons for agreeing or disagreeing with the statement, and there is no right or wrong answer. Please tell me whether you agree or disagree:		
<b>STORY</b>		<b>A8.01</b>
<b>B</b>	Manemma takes a loan from the SHG to start a small home business. But her husband argues with her that the money is needed for land improvement, and she reluctantly parts with the loan money. Do you agree with the husband?	1=Agree 2=Disagree

Source: Survey-specific innovations in measurement<sup>66,67</sup>

## B. Measurement of Economic Outcomes

In this section, we present instruments for measuring savings, access to credit, consumption, asset ownership, labor force participation and income, entrepreneurship, and agricultural outcomes. Each of these indicators has its own measurement challenges, but the theories of change underlying economic self-help group, savings groups, and other women's groups suggest that each indicator is important for determining the comprehensive effects of women's groups on economic outcomes. As shown in Table 1, economic outcome indicators include (for either the household, the individual woman, or both) asset ownership, consumption/poverty, agricultural outcomes, labor market participation, women's labor and business income, formal and informal credit, and savings, and time spent on household chores.

### *Savings and Credit*

When measuring savings and credit, and seeking to understand the role of a group, it is critical to include measures of barriers, access, and participation in informal and formal savings and credit options. This includes measuring savings in women's groups, banks, and mobile and informal saving groups, as well as credit from banks and informal money lenders. In addition, it is important to ask questions about interest rates charged by banks and local money lenders to account for possible general equilibrium effects of women's groups. We present measurement instruments for credit and savings based on the impact evaluations conducted by the Social Observatory in Tables B-1, B-2, and B-3, respectively. Table B-1 also includes survey questions that are specific to agricultural credit based on the 50 x 2030 initiative, which intends to produce regular, accessible, agricultural data for 50 LMICs by 2030.<sup>68</sup>

From the questions on loans (Table B-1), one can construct indicators for any outstanding loans (number of outstanding loans) and the value of outstanding loans (local currency), held by the woman individually or the household, and separate indicators for outstanding loans from women's groups. In addition, descriptive information can be compiled on monthly interest rates, loan providers, and the reasons for taking a loan. From the questions on savings in general (Table B-2), one can construct indicators for any savings, the amount of savings, and descriptive information on the location of savings, including savings in women's groups. From the questions on participation and savings in groups specifically (Table B-3), one can construct measures for the existence of groups in the community and participation in those groups (last 12 months), including attendance at group meetings, exposure to trainings, and existence of savings and contributions (any, and how much). In addition, descriptive information on types of trainings, reasons for saving, and reasons for not joining a group (if the respondent is not part of any group) can be collected. It should be noted that this template should be adapted to fit the

important parameters for the particular women’s group model that is being evaluated. In addition, researchers should pre-specify which types of indicators they expect to have impacts on, depending on the type of program, the theory of change, and the existing level of savings or exposure to financial products or services in the target population.

**Table B-1. Loans and Current Debt Information**

<b>B1.01</b>		Presently, does the household hold any outstanding loans (either formal or informal)?						1=Yes, 2=No → Next section	
<b>B1.02</b>		How many outstanding loans does the household hold presently?						[Number of outstanding loans]	
<b>ENUMERATOR:</b> Ask participant for up to the three largest loans (in size of original loan) and record them in order of size.									
	<b>B1.03</b>	<b>B1.04</b>	<b>B1.05</b>	<b>B1.06</b>	<b>B1.07</b>	<b>B1.08</b>	<b>B1.09</b>	<b>B1.10</b>	
Loan ID	Household member who took the loan [Enter ID from roster]	When was this loan taken? [mm / yy]	For [LOAN ID], how much was borrowed in total? [Local currency]	Currently, how much of [LOAN ID] does your household still have to repay? [Local currency]	How much is the monthly interest rate on the loan? [%]	Who provided the loan? <b>USE CODE B1 ↓</b>	Was any collateral provided for this loan?	What was the purpose of taking this loan? <b>USE CODE B2 ↓</b> [Record up to three options]	
1						<b>CODE B1</b> 1=Money lender 2=Bank 3=SHG 4=NGO	1=Yes 2=No	<b>CODE B2</b> 1=Health expenses 2=Invest in livestock 3=Invest in other assets (household or productive assets)	
2						5=Friend / relative 6= Co-operative society 7=Savings Group 8= Other	1=Yes 2=No	4=Start agricultural business 5=Agricultural input credit 6=Agricultural marketing credit 7=Other investment in agricultural business 8=Start in non-agricultural business	
3						9=Other farmer’s organization 10=Employer/landlord 11= Shopkeeper/trader 98=Other, specify	1=Yes 2=No	9=Invest in existing non-agricultural business 6=Fund own marriage or dowry 7=Fund marriage or dowry of family member 8=Fund funeral of family member 9=Fund other shock 10=Food purchases 11=Education of children 12=Make home repairs/improvements 13=Pay for a loan/debt 14=For security in case of future emergencies 15=Other, specify	

Source: Social Observatory, World Bank (adapted), used in Hoffman et al.<sup>69</sup> & 50 x 2030 initiative<sup>70</sup>

**Table B-2. Savings**

QUESTION		RESPONSE OPTIONS
B2.01	Some people try to save some money for emergencies or to buy something special in the future. Are you personally currently saving money?	1=Yes 2=No → Next section
B2.02	How much have you personally saved in cash (local currency)?	
B2.03	During the last 12 months, where did you usually deposit your savings?	1=In-house 2=Relative / friend 3=Post office 4= Local savings co-op / SHG 5=Bank 6=Mobile money account 7=Other, specify

Source: Social Observatory, World Bank (adapted), used in Hoffman et al.<sup>71</sup>

**Table B-3. Participation in Self-Help Groups (modify for savings or other types of specific groups)**

QUESTION		RESPONSE OPTIONS
B3.01	Are there any SHGs currently operating in your community?	1=Yes 2=No
B3.02	Within the last 12 months, have you belonged to any of the SHGs?	1=Yes, current member 2=Yes, member in last 12 months 3=No → B03.13
B3.03	How often did you attend SHG meetings in the last 4 weeks?	Number of times
B3.04	For what purpose did you attend SHG meetings? [Mark all that apply]	1=To obtain access to credit 2=To save in a group 3=To participate in trainings 4=To meet with friends 5=To meet new friends 6=Other, specify
B3.05	Did you participate in any trainings organized by the SHG in the last 12 months?	1=Yes 2=No → B3.07
B3.06	What trainings did you participate in? [Mark all that apply]	Training type (adapt based on context; options are based on Indian context) 1=Training on VO books of records 2=Training on VO concept & management 3=Immersion & training of women activists 4=Training for internal community resource person 5=Internal community resource person training for community cadres 6=Training for CLF accountant 7=Immersion training of active women 8=Training on SHG books of records 9=Training on books of records for RBKs 10=Training on Bank Sakhi Program 11=Livelihoods training 12=SHG concept & management 13=SHG credit linkages 14=SHG concept & management and leadership 15=Micro credit plan training 16=SHG concept & bookkeeping (primary books) 17=Financial literacy training 18=Health education 99=Other, specify

QUESTION		RESPONSE OPTIONS
B3.07	How much do you currently have saved with the SHG?	Local currency
B3.08	What do you plan to do with your savings after share-out? [Mark all that apply]	1=Health expenses 2=Invest in livestock 3=Invest in other assets (household or productive assets) 4=Start or invest in agricultural business 5=Start or invest in non-agricultural business 6=Fund own marriage or dowry 7=Fund marriage or dowry of family member 8=Fund funeral of family member 9=Fund other shock 10=Food purchases 11=Education of children 12=Make home repairs/improvements 13=Pay for a loan/debt 14==For security in case of future emergencies 15=Other, specify
B3.09	How frequently did you contribute to savings in the group in the last 12 months?	1=On a weekly basis 2=On a biweekly basis 3=On a monthly basis 4=Every 3 months 5=Every 6 months 6=Once 7=Other, specify
B3.10	How much did you contribute each time, on average?	Local currency
B3.11	Was there any point in the last 12 months that you could not contribute to savings?	1=Yes 2=No
B3.12	What did you do when you could not contribute to savings?	1=Ask other group members to contribute 2=Doubled the amount contributed to next round 3=Not contribute during that round 4=Take a loan to contribute more next round 5=Other, specify
<b>Drop-out: If B3.02=2 or B3.02=3</b>		
B3.13	If you are not currently a member of a SHG, were you ever a member?	1=Yes 2=No
B3.14	Why are you no longer a member of the SHG?	1=Could not contribute savings 2=Could not obtain access to credit 3=Other group members told me to leave 4=Husband did not allow me to participate 5=Other household members did not allow me to participate 6=Pushback from other community members 7=Group no longer exists 8=Group did not organize meetings 9=Other, specify

Source: Social Observatory, World Bank (adapted), used in Hoffman et al.<sup>72</sup>

## Consumption

To measure consumption, a diary can be left at a household so that a primary respondent can record consumption for all household members, or a recall survey is conducted where a primary respondent is asked to estimate total household consumption over a fixed time period.<sup>73</sup> Within these categories, there are various options for disaggregation. Both the precision and the costs of household surveys increase with the level of disaggregation of the consumption module. Results from a survey experiment suggest that a long, disaggregated list of items with a 7-day recall period is possibly the most cost-effective way to measure consumption.<sup>74</sup> However, the evidence on this measurement of consumption is scant and inconsistent, likely because most studies are nonexperimental, few studies vary *just* the length of the module, and many do not capture the same definition of consumption, or compare the short module's performance to different benchmarks.<sup>75</sup> In addition, survey fatigue can limit the reliability of the measurement of consumption.

The length of a consumption module may be adjusted in two ways. The first is the “subset” approach, where the most common individual items are selected. For example, Beegle et al. (2012)<sup>76</sup> selected 17 out of 58 food items that account for about 77% of food consumption in Tanzania. The second is a “collapse” approach, where individual items are aggregated into broader categories. In the same study in Tanzania, the authors collapsed 58 individual food items into 12 categories. A comparison between these two approaches showed that the subset module performed similarly to a benchmark,<sup>§,77</sup> while the collapsed module significantly underestimated consumption. Natali and Neubourg (2014)<sup>78</sup> found that both approaches performed similar to a benchmark\*\* in terms of total household consumption and poverty rates in Bangladesh. However, individual components did not align well with the benchmark, suggesting that shorter modules are better suited to measuring total consumption rather than individual components of consumption.

Based on this evidence, one approach for measuring consumption is to replicate the consumption module of the last national expenditure survey to ensure that consumption and poverty measures are aligned with national statistics. However, we recognize that not all evaluations will have the necessary resources to replicate a national expenditure survey, and that survey fatigue may compromise the quality of data collection when the consumption module is too long. Nonetheless, some evaluations may wish to obtain a comprehensive and reliable measure of consumption by using national expenditure surveys. In this case, detailed information on national survey models, training protocols, price deflation values, and data cleaning methodology (i.e., treatment of outliers or replacing missing values) should be sought on a country-by-country basis.

The poverty scorecard approach is an alternative option if consumption is being used as a proxy for socio-economic standing and poverty. It was developed to overcome the limitations of classic poverty measurement, including costly surveys, the time taken to administer

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<sup>§</sup> The benchmark is a frequently supervised personal diary.

<sup>\*\*</sup> The benchmark is the 2010 Household Income and Expenditure Survey (HIES).

consumption modules, and accuracy. The poverty scorecard approach uses 10 verifiable questions to estimate the likelihood that a household will fall below the poverty line. Example indicators include dwelling characteristics and ownership of specific assets. Each indicator has a point value, with 100 indicating the highest probability of being poor. Poverty scorecards have been developed for over 30 countries and validated through national expenditure surveys. The methodological approach and country scorecards are [publicly available](#). In general, the sum of the ten responses provides a score that is equivalent to the likelihood of being below the poverty line as documented by a given country's scorecard derived from logistic regression analysis adjusted by an additive bias-adjustment factor.<sup>79</sup>

While we do not provide details on alternatives to consumption measurement (including caloric intake), measuring some type of intra-household consumption or poverty measure will be important in many settings as aggregate household measures can obscure individual household access to dietary quality. One alternative to measuring individual consumption is to ask individual-level questions about food security and dietary diversity. For example, a dietary diversity scale recommended by the Food and Agriculture Organization (FAO) is based on questions about different foods (using ten food groups) that have been consumed in the 24 hours prior to the interview (Minimum Dietary Diversity for Women of Reproductive Age Scale [MDD-W]).<sup>80</sup> Table B-4 presents an instrument that measures dietary diversity for women, which can be used to construct measures of minimal adequate dietary diversity. It is important to note that the model questionnaire provides a few examples of food items for each row in the questionnaire. When adapting the questionnaire, these examples need to be replaced with lists of common foods in the local context. Please see guidance from the FAO and USAID<sup>81</sup> for detailed instructions on how to train enumerators, examples of what qualifies for each category of food, and how to adapt the module to suit local contexts.

**Table B-4. Minimum Dietary Diversity for Women of Reproductive Age (MDD-W)**

<p><b>ENUMERATOR:</b> Now I'd like to ask you to describe everything that you ate or drank yesterday during the day or night, whether you ate it at home or anywhere else. Please include all foods and drinks, any snacks or small meals, as well as any main meals. Remember to include all foods you may have eaten while preparing meals or preparing food for others. Please also include food you ate even if it was eaten elsewhere, away from your home. Let's start with the first food or drink consumed yesterday.</p> <ul style="list-style-type: none"> <li>• Did you have anything to eat or drink when you woke? If yes, what? Anything else?*</li> <li>• Did you have anything to eat or drink later in the morning? If yes, what? Anything else?*</li> <li>• Did you eat or drink anything at mid-day? If yes, what? Anything else?*</li> <li>• Did you have anything to eat or drink during the afternoon? If yes, what? Anything else?*</li> <li>• Did you have anything to eat in the evening? If yes, what? Anything else?*</li> <li>• Did you have anything else to eat or drink in the evening before going to bed or during the night? If yes, what? Anything else?*</li> </ul> <p>* For each eating episode, after the respondent mentions foods and drinks, probe to ask if she ate or drank anything else. Continue probing until she says "no, nothing else". If the respondent mentions a mixed dish like a soup or stew, ask for all the ingredients in the mixed dish. For mixed dishes where it is possible to pick out ingredients or consume only broth, ask if she herself ate each ingredient or if she only had the broth. Continue to probe about ingredients until she says "nothing else".</p> <p><b>MDD-W REQUIRED (ROWS A–N TO BE AGGREGATED DURING ANALYSIS INTO 10 MDD-W FOOD GROUPS)</b></p>
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As the respondent recalls foods and drinks, mark the corresponding item in the “Description/ examples to be adapted” column and mark ‘1’ in the response column for that row on the questionnaire. If more than one item in a row is mentioned, mark each item. If the same food or drink is mentioned more than once, you do not need to mark it again after the first time. [Optionally: If the food is not listed in any of the rows on the questionnaire, write the food in the bottom row labelled “Other beverages and foods.”]

FOOD CATEGORIES		DESCRIPTION / EXAMPLES	B7.01: Consumed?
<b>A</b>	Food made from grains	Porridge, bread, rice, pasta/noodles, or other foods made from grains	1= Yes 2= No
<b>B</b>	White roots and tubers and plantains	White potatoes, white yams, manioc/cassava/yucca, cocoyam, taro, or any other foods made from white-fleshed roots or tubers, or plantains _	1= Yes 2= No
<b>C</b>	Pulses (beans, peas, and lentils)	Mature beans or peas (fresh or dried seed), lentils or bean/pea products, including hummus, tofu, and tempeh	1= Yes 2= No
<b>D</b>	Nuts and seeds	Any tree nut, groundnut/peanut or certain seeds, or nut/seed “butters” or pastes	1= Yes 2= No
<b>E</b>	Milk and milk products	Milk, cheese, yoghurt, or other milk products, but NOT including butter, ice cream, cream, or sour cream	1= Yes 2= No
<b>F</b>	Organ meat	Liver, kidney, heart, or other organ meats or blood-based foods, including from wild game	1= Yes 2= No
<b>G</b>	Meat and poultry	Beef, pork, lamb, goat, rabbit, wild game meat, chicken, duck, or other bird	1= Yes 2= No
<b>H</b>	Fish and seafood	Fresh or dried fish, shellfish, or seafood	1= Yes 2= No
<b>I</b>	Eggs	Eggs from poultry or any other bird	1= Yes 2= No
<b>J</b>	Dark green leafy vegetables	List examples of any medium-to-dark green leafy vegetables, including wild/foraged leaves	1= Yes 2= No
<b>K</b>	Vitamin A-rich vegetables, roots, and tubers	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside (see FAO & USAID, 2010, for other less-common vitamin A-rich vegetables)	1= Yes 2= No
<b>L</b>	Vitamin A-rich fruits	Ripe mango, ripe papaya (see FAO & USAID, 2010, for other less-common vitamin A-rich fruits)	1= Yes 2= No
<b>M</b>	Other vegetables	List examples of any other vegetables	1= Yes 2= No
<b>N</b>	Other fruits	List examples of any other fruits	1= Yes 2= No
<b>MDD-W OPTIONAL (ROWS O–T TO BE DETERMINED BY SURVEY DESIGNERS DURING ADAPTATION PROCESS)</b>			
<b>O</b>	Insects, insect larvae/grubs, insect eggs, and land and sea snails		1= Yes 2= No
<b>P</b>	Red palm oil		1= Yes 2= No
<b>Q</b>	Oil; fats or butter added to food or used for cooking, including extracted oils from nuts, fruits, and seeds; and all animal fat		1= Yes 2= No
<b>R</b>	Crisps and chips, fried dough, or other fried snacks		1= Yes 2= No
<b>S</b>	Sugary foods, such as chocolates, candies, cookies/sweet biscuits and cakes, sweet pastries, or ice cream		1= Yes 2= No
<b>T</b>	Sweetened fruit juices and “juice drinks,” soft drinks/fizzy drinks, chocolate drinks, malt drinks, yoghurt drinks, or sweet tea or coffee with sugar		1= Yes 2= No
<b>MDD-W REQUIRED</b>			
<b>U</b>	Condiments and seasonings	Ingredients used in small quantities for flavor, such as chilies, spices, herbs, fish powder, tomato paste, flavor cubes or seeds	1= Yes 2= No
<b>V</b>	Other beverages and foods* (optionally, specify if not listed)	Tea or coffee if not sweetened, clear broth, alcohol, pickles, olives, and similar _____	1= Yes 2= No

\* If rows O, P, Q, R, S, and/or T are not included, examples for the “Other beverages and foods” category must be expanded to include these types of items.

Source: FAO and USAID’s Minimum Dietary Diversity for Women of Reproductive Age Scale<sup>82</sup>



## Asset Ownership

When measuring productive asset ownership (including land), one promising approach is to use the pro-WEAI module (Table B-5). The main advantage of the WEAI is that it includes indicators for individual asset ownership (which can be used for women-specific and men-specific measures) as well as household asset ownership (which can be used to measure more general household wealth accumulation). Further, if administered in alignment with the protocol for the pro-WEAI, measures of gender asset gaps for a primary woman and a primary man can be calculated. As previously mentioned, the pro-WEAI has been validated in several contexts in sub-Saharan Africa and South Asia. Specific asset types should be adapted by country context, population, and relevancy to the particular intervention. The module is relatively short and easy to implement. If evaluations would benefit from more detail across the “bundle of rights” related to asset use, management, and ownership, researchers can consult the full version of the WEAI.<sup>83</sup> (Alkire et al., 2013). In the pro-WEAI, a woman’s asset ownership is considered “adequate” if she owns any of the following, either solely or jointly: (1) three small assets (e.g., poultry, nonmechanized farm equipment, or small consumer durables); (2) at least two large assets; or (3) land.<sup>84</sup>

## Time Use

When measuring economic behavior, time-use modules have been found to be highly informative.<sup>85,86,87,88,89</sup> These modules provide information on how women (and/or men) spend their time, including their participation in the labor market (productive activities), their time spent on household chores, and their leisure time. The WEAI includes a module on time use based on 24-hour recall (Table B-6), where time increments are recorded in 15-minute segments. Activity codes can be adapted to the local context and program evaluation. In the time-use survey, we also include an activity code for participation in women’s groups. The pro-WEAI time-use analysis scores a woman’s time use as “adequate” if she works less than 10.5 hours per day.<sup>90</sup> Workload is calculated as time spent in a primary work activity, plus 0.5 x time spent in childcare as a secondary activity.

**Table B-5. Individual-Level Productive Asset Ownership**

Now I'd like to ask you specifically about your household's land.				
QUESTION		RESPONSE		
G3.01. Does anyone in your household currently own or cultivate land?		YES.....1 NO.....2 → G3.06, ITEM A		
G3.02. Who generally makes decisions about what to plant on this land?	ENTER UP TO 3 MEMBER IDs	ID #1	ID #2	ID #3
	OTHER CODES: NON-HH MEMBER.....94 NOT APPLICABLE.....98			
G3.03. Do you [NAME] solely or jointly cultivate any land?	<b>CIRCLE ONE</b>	YES, SOLELY..... 1 YES, JOINTLY..... 2 YES, SOLELY AND JOINTLY 3 NO ..... 4		
	ENTER UP TO 3 MEMBER IDs	ID #1	ID #2	ID #3

<b>G3.04.</b> Who generally makes decisions about what to plant on the land that you yourself cultivate?	<b>OTHER CODES:</b> NON-HH MEMBER.....94 NOT APPLICABLE.....98			
<b>G3.05.</b> Do you own any of the land owned or cultivated by your household?	<b>CIRCLE ONE</b>	YES, SOLELY..... 1	YES, JOINTLY..... 2	YES, SOLELY & JOINTLY ..... 3
		NO ..... 4		

Now I'd like to ask you about a number of items that could be used to generate income.	Does anyone in your household currently have any [ITEM]?	Do you [NAME] own any [ITEM]? USE CODE G1 ↓
ITEM	G3.06	G3.07
<b>A</b> Large livestock (cattle, buffaloes)	YES ..... 1 NO ..... 2 → ITEM B	<b>CODE G1</b> YES, SOLELY ..... 1 YES, JOINTLY ..... 2 YES, SOLELY & JOINTLY ..... 3 NO ..... 4
<b>B</b> Small livestock (sheep, goats, pigs)	YES ..... 1 NO ..... 2 → ITEM C	
<b>C</b> Poultry and other small animals (chickens, ducks, turkeys)	YES ..... 1 NO ..... 2 → ITEM D	
<b>D</b> Fish pond or fishing equipment	YES ..... 1 NO ..... 2 → ITEM E	
<b>E</b> Non-mechanized farm equipment (hand tools, animal-drawn plough)	YES ..... 1 NO ..... 2 → ITEM F	
<b>F</b> Mechanized farm equipment (tractor-plough, power tiller, treadle pump)	YES ..... 1 NO ..... 2 → ITEM G	
<b>G</b> Non-farm business equipment (solar panels used for recharging, sewing machine, brewing equipment, fryers)	YES ..... 1 NO ..... 2 → ITEM H	
<b>H</b> House or building	YES ..... 1 NO ..... 2 → ITEM I	
<b>I</b> Large consumer durables (refrigerator, TV, sofa)	YES ..... 1 NO ..... 2 → ITEM J	
<b>J</b> Small consumer durables (radio, cookware)	YES ..... 1 NO ..... 2 → ITEM K	
<b>K</b> Cell phone	YES ..... 1 NO ..... 2 → ITEM L	
<b>L</b> Other land not used for agricultural purposes (pieces/plots, residential or commercial land)	YES ..... 1 NO ..... 2 → ITEM M	
<b>M</b> Means of transportation (bicycle, motorcycle, car)	YES ..... 1 NO ..... 2 → NEXT MODULE	

Source: Women's Empowerment in Agriculture Index, program version (pro-WEAI).<sup>91</sup>



## *Employment and Livelihoods*

To measure employment and livelihoods, we include survey questions from an impact evaluation of a livelihoods program for poor women in Northern Uganda (the Women's Income Generating Support (WINGS) program).<sup>93</sup> The survey includes questions on household members' labor market participation, as well as income from farm and nonfarm economic activities or businesses. We also provide alternative formulations of some survey questions for adaptations to other contexts. In addition, we include alternative questions on income from farm activities in the section on agricultural outcomes. Tables B-7 to B-17 include survey questions from the impact evaluation of the livelihoods program that measure women's employment and labor market participation, as well as income earned through self-employment. These questions may not be necessary if women's groups do not include a strong livelihood component, but researchers should consider including them where women's groups focus on the creation of livelihoods and skilling. The questions will require adaptations depending on the sectors most program participants are active in. In this guide we have also not included questions about sectors that are likely highly specific to the context of Northern Uganda, such as beer brewing. However, researchers may want to consider asking questions about businesses in a specific sector if the livelihoods training focuses on that sector.

The survey questions enable researchers to estimate women's income in the last 4 weeks, and in the last week both in general and by sector. Question D.01 provides researchers with the woman's income in the last four weeks, while Question D.02 presents the woman's income in the last week. Other survey questions provide income earned in a specific sector. Finally, the survey questions enable researchers to estimate women's labor force participation in general and by sector by multiplying the number of days women work per week with the number of hours the women work.

To collect data about livelihoods, we have included survey questions from the impact evaluation of the livelihoods program in Uganda and questions from a Sri Lankan female enterprise survey that was developed for an impact evaluation of a business training program to measure labor force participation and income from women's own businesses.<sup>94</sup> Tables B18 to B21 include survey questions from the survey from Sri Lanka, which includes more detailed questions for female entrepreneurs, and is [publicly available](#).

The survey includes contextual questions about how the business started and operates as well as questions with which researchers can estimate women's likelihood of starting their own business, their number of employees, and their business income, sales, and profits. Question G11 will allow the researcher to determine whether any woman in the household owns a business, while question G25 measures the number of employees for each business. Total expenses can be calculated by summing the expenses for several business categories in question G30, while question G31 will allow researchers to estimate business sales. Profits can be calculated by subtracting expenses from sales.

**Table B-7. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work for pay]**

READ: I am interested in all of the activities you have taken to earn any cash, including not only regular work but also petty jobs and occasional work such as selling firewood or household items..													
ID Code	Name	About how much cash in total did you earn in the past 4 weeks?	About how much cash did you earn in total in the past 7 days?	READ: Now I want to ask you about the type of work you did in the last 4 weeks. This includes activities you do for money or trade, or for yourself and your household.	Have you hunted?	In the past 4 weeks, about how many days did you hunt?	In the past 7 days, how many days did you hunt?	On average, how many hours per day did you hunt?	Did you earn any cash from hunting in the last 7 days?	Did you receive any other items or goods in exchange for this work other than cash?	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?	
		D.01	D.02		1=Yes 0=No	D.03a	D.03b	D.03c	D.03d	1=Yes 0=No	D.03f 1=Yes 0=No	D.03g 1=Yes 0=No	D.03h 1=Yes 0=No

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda.<sup>95</sup>

**Table B-8. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work on farm outside the household]**

ID Code	Have you dug in someone's garden/worked on producing crops on someone's farm?	In the past 4 weeks, about how many days did you dig in someone's garden/work on producing crops on someone's farm?	In the past 7 days, how many days did you dig in someone's garden/work on producing crops on someone's farm?	On average, how many hours per day did you dig in someone's garden/work on producing crops on someone's farm?	Did you earn any cash from digging in someone's garden/working on producing crops in someone's farm in the last 7 days?	Did you receive any other items or goods in exchange for this work other than cash?	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?
	D.04a	D.04b	D.04c	D.04d	D.04e 1=Yes 0=No	D.04f 1=Yes 0=No	D.04g 1=Yes 0=No	D.04h 1=Yes 0=No

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>96</sup>

**Table B-9. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work on own farm]**

ID Code	Have you dug in your own garden/worked on your own farm (including cash crops)?	In the past 4 weeks, about how many days did you dig in your own garden/work on producing crops on your own farm?	In the past 7 days, how many days did you dig in your own garden/work on producing crops on your own farm?	On average, how many hours per day did you dig in your own garden/work on producing crops on your own farm?	Did you earn any cash from digging in your own garden/working on your own farm producing crops in the last 7 days?  1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash?  1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?  1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?  1=Yes 0=No
	D.05a	D.05b	D.05c	D.05d	D.05e	D.05f	D.05g	D.05h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>97</sup>

**Table B-10. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Livestock tending outside the household]**

ID Code	Have you taken care of someone else's animals?	In the past 4 weeks, about how many days did you take care of someone else's animals?	In the past 7 days, how many days did you take care of someone else's animals?	On average, how many hours per day did you take care of someone else's animals?	Did you earn any cash from taking care of someone else's animals in the last 7 days?  1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash?  1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?  1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?  1=Yes 0=No
	D.06a	D.06b	D.06c	D.06d	D.06e	D.06f	D.06g	D.06h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>98</sup>

**Table B-11. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Raising own livestock]**

ID Code	Have you taken care of (raising) your own animals?	In the past 4 weeks, about how many days did you take care of your own animals?	In the past 7 days, how many days did you take care of your own animals?	On average, how many hours per day did you take care of your own animals?	Did you earn any cash from taking care of your own animals in the last 7 days?  1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash?  1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?  1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?  1=Yes 0=No
	D.07a	D.07b	D.07c	D.07d	D.07e	D.07f	D.07g	D.07h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>99</sup>

**Table B-12. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Casual labor]**

ID Code	Have you performed casual labor?	In the past 4 weeks, about how many days did you perform casual labor?	In the past 7 days, how many days did you perform casual labor?	On average, how many hours per day did you perform casual labor?	Did you earn any cash from performing casual labor in the last 7 days?  1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash?  1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?  1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?  1=Yes 0=No
	D.08a	D.08b	D.08c	D.08d	D.08e	D.08f	D.08g	D.08h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>100</sup>

**Table B-13. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work for women’s groups]**

ID Code	Have you worked for a self-help or other women’s group?	In the past 4 weeks, about how many days did you work for a self-help or other women’s group?	In the past 7 days. how many days did you work for a self-help or other women’s group?	On average, how many hours per day did you work for a self-help or other women’s group?	Did you earn any cash from working for a self-help or other women’s group in the last 7 days?  1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash?  1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?  1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?  1=Yes 0=No
	D.09a	D.09b	D.09c	D.09d	D.09e	D.09f	D.09g	D.09h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>101</sup>

**Table B-14. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work employed in a company]**

ID Code	Have you worked as an employee for a company?	In the past 4 weeks, about how many days did you work as an employee for a company?	In the past 7 days. how many days did you work as an employee for a company?	On average, how many hours per day did you work as an employee for a company?	Did you earn any cash from working for an employee or a company?  1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash?  1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?  1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?  1=Yes 0=No
	D.10a	D.10b	D.10c	D.10d	D.10e	D.10f	D.10g	D.10h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>102</sup>



**Table B-15. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work in government or politics]**

ID Code	Have you had a government job or political position?	In the past 4 weeks, about how many days did you work in a government job or political position?	In the past 7 days, how many days did you work in a government job or political position?	On average, how many hours per day did you in a government job or political position?	Did you earn any cash from working in a government job or political position? 1=Yes 0=No	Did you receive any other items or goods in exchange for this work other than cash? 1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)? 1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days? 1=Yes 0=No
	D.11a	D.11b	D.11c	D.11d	D.11e	D.11f	D.11g	D.11h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>103</sup>

**Table B-16. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Work in aquaculture or fishing]**

ID Code	Have you had fished or worked on a fish farm?	In the past 4 weeks, about how many days did you fish or work on a fish farm?	In the past 7 days, how many days did you fish or work on a fish farm?	On average, how many hours per day did you fish or work on a fish farm?	Did you earn any cash from fishing or working on a fish farm? 1=Yes 0=No	Did you receive any other items or goods from fishing or working on a fish farm? 1=Yes 0=No	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)? 1=Yes 0=No	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days? 1=Yes 0=No
	D.12a	D.12b	D.12c	D.12d	D.12e	D.12f	D.12g	D.12h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>104</sup>

**Table B-17. Survey Questions From a Household Questionnaire to Measure Employment and Labor Force Activities in Uganda [Other types of work]**

ID Code	Are there any other activities you have done for money or trade, apart from those that we discussed?	What was the activity?	In the past 4 weeks, about how many days did you work at [say activity]?	In the past 7 days, how many days did you work at [say activity]?	On average, how many hours per day did you work at [say activity]?	Did you earn any cash from working at [say activity]?	Did you receive any other items or goods from [say activity]?	Did you produce or keep any items or goods for you or your own household (food, clothes, or other)?	Are you still waiting to receive any cash or non-cash payment for any of this work you performed in the last 7 days?
	D.013a		D.13b	D.13c	D.13d	D.13e	D.13f	D.13g	D.13h

Source: Baseline survey for enterprises for ultra poor women after war: The WINGS program in Northern Uganda (adapted).<sup>105</sup>

**Table B-18. Survey Questions to Measure Business and Entrepreneurship**

Enumerator: Ask these questions to the member with most knowledge about household business activity.														
ID Code	Does any woman in the household currently own a business?	Which woman	ID Code	What is the firm's current legal ownership status?	What is the nature of your business, or what does your activity consist of?	How many hours a week do you personally spend working in the business?	Where is your business located: in your home, or some other place?	Does your business operate in a permanent place or is it mobile?	Which of the following best describes the fixed location?	Is this site your own (or your family's) property/rented?	Did you start the business from scratch or was it inherited or purchased from your parents or someone else?	If you did not start the business from scratch, how did it start?	When did the business begin operations?	
Household ID	G11	G12	G13	G14	G15	G16a	G16b	G17	G18	G19	G20	G21	G22	G23
	Ownership of Business	Individual ID	Business ID	Ownership status	Respondent's answer	Hours last week	Hours in normal week						Month	Year
													999=Don't know	999=Don't know

<b>Business Codes G14–G20</b>			
Ownership status codes	Business location codes	Permanent or mobile location codes	Fixed location codes
<b>G14</b> 1=Sole proprietorship 2=Partnership 3=Private limited liability company 4=Public limited liability company 5=Government company 6=Co-operative establishment 7=Clubs and associations 8=SHG establishment 9=Savings group establishment 10=Other (specify)	<b>G17</b> 1=At home 2=Outside of the home but separate building on own land 3=Outside of the home and outside own land 4=Outside of village	<b>G18</b> 1=Fixed location → Go to G19 2=Mobile business → Go to G21	<b>G19</b> 1=Located in a main marketplace 2=Located in a secondary marketplace 3=Located on a busy street with lots of other businesses around 4=Located on a quiet street with other businesses around 5=Located in a residential area

<b>Business Codes G21-G22</b>		
Own property/rented codes	Start business codes	How did the business start codes
<b>G20</b> 1=Own property 2=Property expected to be bought 3=Rented 4=Expecting to rent 5=Borrowed 6=Expecting to borrow 7=Other (specify)	<b>G21</b> 1=Started business from scratch with savings from women's group 2=Started business from scratch with loan from women's group 3=Started business from scratch through different means 2=Purchased or inherited the business	<b>G22</b> 1=Inherited from your parents 2=Inherited from another family member 3=Owned from marriage 4=Purchased from a family member 5=Purchased from someone outside the family

Source: Sri Lanka Female Enterprise Survey<sup>106</sup>

**Table B-19. Survey Questions to Measure Business and Entrepreneurship**

Business ID Code	What type of accounts do you keep for income, expenses, and assets of your business?	Apart from yourself, who else works in this business?		Do you have a bank account (e.g., saving, current, fixed deposit) you use for your business?	Is this bank account in the business's name, in your personal name, or in the women's group's name?	Do you have any inventories of stock, products for sale, raw materials, products in production, spare parts, or other such materials currently held at your business?	How much cash on hand does your business currently have?
	<b>G24</b>	<b>G25a</b>	<b>G25b</b>	<b>G26</b>	<b>G27</b>	<b>G28</b>	<b>G29</b>
		Works in business (more than 1 answer possible)	How many	1=Yes 2=No		1=Yes 2=No	Local currency

Household Business Activity Codes G24–G27		
Accounts codes	Who else works in the business codes	Bank account in whose name codes
<b>G24:</b> 1=Through formal accounting (using services of a professional within firm) 2=Through formal accounting (using the services of a professional outside firm) 3=Personal recordkeeping or other records 4=Does not do any accounting 5=Other (specify)	<b>G25</b> 1=Spouse 2=Children 3=Sibling 4=Parent 5=Other relative 6=Non-relative: women's group member	<b>G27</b> 1=Business name 2=Personal name 3=Name of other family member's name 4=Women's group name 5=Other (specify)

Source: Sri Lanka Female Enterprise Survey<sup>107</sup>

**Table B-20. Survey Questions to Measure Business Expenses**

Please report the amount you have spent on each of the following categories of business expenses during the last month.	
<b>G30</b>	Local currency
Purchase of materials and items for resale	
Purchase of electricity, water, gas, and fuel	
Interest paid on loans	
Wages and salaries for employees	
Rent for land or buildings	
Taxes	
Other expenses, including equipment rental, telephone, transportation	
Total expenses in the last month	

Source: Sri Lanka Female Enterprise Survey<sup>108</sup>

**Table B-21. Survey Questions to Measure Business Income**

Business ID Code	Can you tell me the total monthly sales of your business in [LAST MONTH], from all sources, including manufacturing, trade and services?	What was the total income the business earned during [LAST MONTH] after paying all expenses, including wages of employees but not including any income you paid yourself? That is, what were the profits of your business during the last month?	Which of the following businesses are socially acceptable for women like you to work in?
	<b>G31</b>	<b>G32</b>	<b>G33</b>

Socially acceptable business codes G33 (based on survey from Sri Lanka; adapt to context)
1=Making string hoppers 2=Bicycle repair shop 3=Store operated from within the home 4=Store operated from outside the home; operated from the women's group 5=Store operated from outside the home; operated from somewhere else 6=Beauty shop 7=Tea/coffee shop operated from outside the home 8=Bakery

Source: Sri Lanka Female Enterprise Survey<sup>109</sup>

### *Agricultural Outcomes*

Accurately attributing changes in agricultural productivity to women's groups is difficult due to the seasonality of production and the seasonal variability in prices and quantities, driven to a large degree by climate. As a result, measuring agricultural productivity well can require a time series of observations to control for climatic variation, as well as a long survey instrument if households produce more than one crop. For this reason, researchers may choose to focus on only a few main crops or decide to measure indicators other than agricultural productivity (the total value of agricultural outputs/the total value of agricultural inputs). Regardless, researchers will want to create the appropriate crop roster for their agricultural context, an example of which is provided below. To account for output variability driven by unexpected climate or other environmental stressors (rather than farm management knowledge or input access that may change with group participation), researchers can use additional indicators including measures of change in input access and use, consumption smoothing, or land ownership, which are more indicative of the impact of group engagement.

In India, the National Sample Survey Office (NSSO) collects agricultural data through the Situation Assessment of Agricultural Households (NSSO-SAAHH) and the Land and Livestock Holdings Survey (NSSO-LLHS). Tables B-22 and B-23 provide information on indicators used in these instruments.

In other countries, the ongoing 50 x 2030 initiative is intended to produce regular, accessible, agricultural data for 50 LMICs by 2030.<sup>110</sup> Data are likely to be available for 30 countries from sub-Saharan Africa, 10 countries from Asia, and 10 countries from Latin America and the Caribbean. These instruments are set to be publicly available by 2020, and questions in this module will draw from that global effort to provide consistent measures of crop and livestock production; inputs including agricultural labor, owned and rented land, and machinery; and diversification and commercialization (farm output sales, prices, and connection to markets).

**Table B-22. Survey Questions to Identify Agricultural Crops Produced in a Household**

QUESTION		RESPONSE OPTIONS	
B9.01	What is the total area of all the plots you cultivated in the last year? (in hectares)	Main growing season	Secondary growing season
B9.02	Total land as of date of survey (enter response in hectares to three digits) a. Owned b. Leased in c. Neither owned nor leased in d. Leased out e. Total possessed (a + b + c + d)	Owned land Leased in land Neither owned nor leased in land Leased out land Total possessed land	
B9.03	List all of the crops you cultivated at least once in the main season	See list of crops below for example from Uganda but adapt to context	
B9.04	List all of the crops you cultivated at least once in the second season	See list of crops below for example from Uganda but adapt to context	
B9.05	Which of these crops were cultivated by women?	See list of crops below for example from Uganda but adapt to context	
B9.06	What was the total value of crops sold after the last harvest? (in local currency)		
B9.07	What was the total value of crops sold after the last harvest produced by women? (in local currency)		
B9.08	What was the total value of livestock products sold over the past month? (in local currency)		
B9.09	What was the total value of livestock products sold by women over the past month? (in local currency)		
B9.10	What share of annual household income is from farm production?		
B9.11	Do you hire wage labor?	1 = Yes 2 = No	
B9.12	Do you own any farming equipment?	1 = Yes 2 = No	
B9.13	Do you rent any farming equipment (including livestock)?	1 = Yes 2 = No	
B9.14	What was your cost of farming equipment rentals and purchases (including livestock) over the last 12 months (in local currency)		
B9.15	Do you receive any extension services or technical advice? Please choose the best answer.	1 = Yes, at least weekly 2 = Yes, at least monthly 3 = Yes, usually twice per year 4 = Yes, usually once per year 5 = No	
B9.16	From whom do you usually receive extension services or technical advice?	1=Government agent 2=Agricultural university 3=Private commercial agent 4=Progressive farmer	

QUESTION		RESPONSE OPTIONS		
		5=Radio/TV/newspaper/Internet/SMS text 6=Coop or other group 7=NGO		
<b>B9.17</b>	From whom do you receive farm input and output price information? Select all that apply.	0 = No information received 1 = Spouse 2 = Neighbor 3 = Co-op or other group 4 = Phone SMS text 5 = Extension 6 = Other (please specify)		
<b>B9.18</b>	Source of income of the household during last 12 months (give the amount earned for each activity and the percentage earned by women)	MARK ALL THAT APPLY  1=Cultivation 2=Livestock 3=Other agricultural activity 4=Non-agricultural enterprises 5=Wage/salaried employment 6=Pension 7=Remittances 8=Others: define	Source of Income	Amount
			Cultivation	
			Livestock	
			Other agricultural activity	
			Non-agricultural enterprises	
			Wage/salaried employment	
			Pension	
			Remittances	
		Others: define		

Crop Codes for B9.03 and B9.04			
A .....Sorghum	H ..... Irish potato	N ..... Vegetables	U ..... Banana
B .....Wheat	I .....Sunflower	O ..... Beans	V ..... Sesame
C .....Maize	J .....Groundnuts	P ..... Peas	W .... Other tree crop/woodland
D .....Millet	K .....Coffee	Q ..... Sugar cane	X ..... Other (specify)
E .....Tobacco	L .....Rice	R ..... Barley	
F .....Cassava	M .....Fruits	S ..... Cotton	
G .....Sweet potato		T ..... Beans/peas	

Source: 50 x 2030 initiative<sup>111</sup> and NSSO-SAAHH (rural households only) and NSSO-HCE<sup>112</sup>

**Table B-23. Survey Questions for the Top Three Main Season Crops (by importance to household)**

Crop	B10.01 Total area planted in last main growing season (local units with conversion factor to ha)			B10.02 Total area harvested in last main growing season (local units with conversion factor to ha)			B10.03 Total quantity harvested in last main growing season (local units with conversion factor to kgs)			B10.04 Production used for own consumption in last year (weight or local currency)	B10.05 Production sold in last year(local currency)	B10.06 Type of seed: 1. local 2. improved	B10.07 How was seed procured? 1.=Farm saved 2.=Exchange 3.=Purchases 4.=Borrowed 5.=Given/gift 6.=Other
	Value	Unit	Conv fact	Value	Unit	Conv Fact	Value	Unit	Conv fact				
1													
2													
3													

Crop	B10.08 From what agency was seed procured? 1. Own farm 2. Local trader 3. Input dealer 4. Coop or other group 5. Gov't agency 6. Local NGO 7. Other	B10.09 Quantity (kg) and cost (local currency) of seeds used	B10.10 Quantity and Cost (local currency) of pesticides used	B10.11 Quantity and cost (local currency) of inorganic fertilizer used	B10.12 Quantity and cost (local currency) of manure used	B10.13 Expenditure (local currency) on irrigation	B10.14 Amount (person-days) and cost (local currency) of hired labor	B10.15 Proportion of inputs (seed, credit, machinery, labor, etc.) obtained or shared via a group	B10.16 Proportion of output marketed via a group
	1								
2									
3									

Source: 50 x 2030 initiative<sup>113</sup> and NSSO SAAHH (rural households only) and NSSO HCE<sup>114</sup>



## C. Measurement of Group Characteristics, Composition, and Functioning

Given the major evidence gap in this area, it is helpful to use instruments to measure both program-specific fidelity of implementation as well as social cohesion and group heterogeneity when measuring group characteristics, functioning, and composition. As shown in Table 1, indicators include fidelity of implementation (including group governance) and social cohesion.

Table 1 includes indicators for whether groups include mechanisms for (1) pooled savings and shared risks, (2) group solidarity and social networks, (3) participatory learning and life skills, (4) critical consciousness of gender, and (5) access to markets and services. This guide includes survey questions about collective savings to understand the pooling of savings and shared risks; social cohesion questions to understand group solidarity and networks; questions to identify the trainings group members receive about participatory learning, life skills, and critical consciousness of gender; and survey questions on whether members started businesses, and on the income they earned through those businesses, to understand access to markets and services. It is critical to triangulate this information with in-depth qualitative research on mechanisms, because quantitative research is unlikely to reliably identify pathways and mechanisms of change without this triangulation.

Measurement of fidelity of implementation will obviously vary depending on the specifics of the women's group. Qualitative studies that use diaries to assess how women's groups implement their planned activities are still relatively scarce, but diaries have been used to good effect in other research, particularly in health and financial studies, though limitations have been noted.<sup>115,116,117</sup> We provide some survey questions in Table C-1, based on our knowledge of women's groups and the tools developed by the International Initiative for Impact Evaluation (3ie) to evaluate the impact of the NRLM. We used these same tools to develop specific survey questions about trainings delivered through a women's group, group composition, and fidelity of implementation at the individual level, which we present in Tables C-2, C-3, and C-4. To measure social cohesion, we provide an instrument developed by the Population Council, presented in Table C-5. For group heterogeneity, measures that provide estimates of caste diversity (where applicable) and ethnic/tribe/language group diversity—in addition to traditional demographic and socioeconomic measures, such as age and income status/sources—may yield important information.

**Table C-1. Survey Questions to Measure Fidelity of Implementation for Women's Groups**

QUESTION		RESPONSE OPTIONS
C1.01	Name of women's group	
C1.02	Date of formation of women's group	
C1.03	Did the women's group exist before the start of the National Rural Livelihoods Mission/Nigeria for Women Project/SLP Plus Program?	1=Yes 2=No
C1.04	Was the women's group integrated under NRLM/NFWP/SLP?	1=Yes 2=No
C1.05	Does the women's group have a bank account?	1=Yes 2=No
C1.06	When was the bank account opened?	
C1.07	Is the women's group a member of the federation?	1=Yes

QUESTION		RESPONSE OPTIONS
		2=No
C1.08	Who in the community provides support to this women's group?	1= Community mobilizers 2= Banks 3=Community resource persons
C1.09	How many members does the women's group have?	
C1.10	Has any member left the women's group after its start?	1=Yes 2=No
C1.11	How many members have left the women's group?	
C1.12	Does the women's group have a cash credit limit with the bank?	1=Yes 2=No
C1.13	What is the cash credit limit?	
C1.14	How often does the group meet per month?	
C1.15	How frequently do the group members contribute to savings?	
C1.16	What are the average savings per member per month?	
C1.17	What are the current accumulated savings of the members?	
C1.18	Does the women's group hold a collective loan?	
C1.19	How many collective loans does the women's group hold?	
C1.20	What is the total value of the outstanding collective loans?	
C1.21	What is the purpose of the collective loans?	1=Health expenses 2=Invest in livestock 3=Invest in other assets (household or productive assets) 4=Start or invest in agricultural business 5=Start or invest in non-agricultural business 6=Fund own marriage or dowry 7=Fund marriage or dowry of family member 8=Fund funeral of family member 9=Fund other shock 10=Food purchases 11=Education of children 12=Make home repairs/improvements 13=Pay for a loan/debt 14=Use for emergencies, in case of shocks 15=Other, specify
C1.22	Who is the current president of the women's group?	
C1.23	Who is the current treasurer of the women's group?	
C1.24	Who is the current secretary of the women's group?	
C1.25	Who was the president of the women's group six months ago?	
C1.26	Who was the treasurer of the women's group six months ago?	
C1.27	Who was the secretary of the women's group six months ago?	
C1.28	Did the group receive any training in the last 12 months?	
C1.29	What trainings did the group receive?	Training type (adapt based on context; options are based on Indian context) 1=Training on VO books of records 2=Training on VO concept & management 3=Immersion & training of women activists 4=Training for internal community resource person 5=Internal community resource person training for community cadres 6=Training for CLF accountant 7=Immersion training of active women 8=Training on SHG books of records

QUESTION		RESPONSE OPTIONS
		9=Training on books of records for RBKs 10=Training on Bank Sakhi Program 11=Livelihoods training 12=SHG concept & management 13=SHG credit linkages 14=SHG concept & management and leadership 15=Micro credit plan training 16=SHG concept & bookkeeping (primary books) 17=Financial literacy training 18=Health Education 99=Others, specify

Source: 3ie evaluation of the NRLM (adapted)<sup>118</sup>

**Table C-2. Trainings**

Training ID	C2.01 What was the topic of the training?	C2.02 Place of training?	C2.03 Who provided training?	C2.04 Number of days of training?	C2.06 Which members attended this training?
Training ID	Training type (adapt based on context)	Provide location codes based on context (example based on Indian context) 1=In village 2=At CLF 3=At block 4=Another district: specify	Provide list of trainers and codes depending on context (example based on Indian context) 1=Internal CRP 2=External CRP 3=Community cadre 4=NRLM staff 5=NGO: specify 6=Other	Number of days	Provide list of members and IDs

Source: 3ie evaluation of the NRLM (adapted)<sup>119</sup>

**Table C-3. Survey Questions to Measure Group Composition**

Member ID	C3.01 Age of member	C3.02 When did the member join the SHG?	C3.03 Marital status	C3.04 Religion	C3.05 Social category (in India)	C3.06 Caste (in India)	C3.07 Ethnicity (in sub-Saharan Africa)	C3.08 Language
	Age	MM/YYYY	1=Never married 2=Married 3=Widow 4=Separated	1=Hinduism 2=Islam 3=Christian 4=Jainism 5=Sikhism 6=Buddhism 99=Other: define	1=General 2=Scheduled caste 3=Scheduled tribe 4=Other backward caste 5=Minority 99=Other	Provide list of Jati's	Provide list of ethnic groups	Provide list of languages

Source: 3ie evaluation of the NRLM (adapted)<sup>120</sup>

Member ID	C3.09 Primary activity of household	C3.10 Primary activity of SHG member	C3.11 Educational status
	1=Agriculture on own land 2=Animal husbandry 3=Fishing 4=Agricultural labor 5=Non-agricultural labor, unskilled (provide examples) 6=Non-agricultural labor, skilled (provide examples) 7=Labor in public works program (e.g., MGNREGA) 8=Enterprise/business/shops 9=Salaried government job 10=Salaried private job 11=Not working/unemployed 12=Senior citizen 13=Child 14=Own household domestic work 15=Student 99=Other: specify	1=Agriculture on own land 2=Animal husbandry 3=Fishing 4=Agricultural labor 5=Non-agricultural labor, unskilled (provide examples) 6=Non-agricultural labor, skilled (provide examples) 7=Labor in public works program (e.g. MGNREGA) 8=Enterprise/business/shops 9=Salaried government job 10=Salaried private job 11=Not working/unemployed 12=Senior citizen 13=Child 14=Own household domestic work 15=Student 99=Other: specify	Provide codes for education (depending on context)

Source: 3ie evaluation of the NRLM (adapted)<sup>121</sup>

**Table C-4. Survey Questions to Measure Fidelity of Implementation at the Individual Level for Women's Groups**

Member ID	C4.01 President	C4.02 Treasurer	C4.03 Secretary	C4.04 Position in social organization	C4.05 Started business after joining women's group	C4.06 Started earning wage after joining women's group	C4.07 Ever received wage from women's group
	1=Yes 2=No	1=Yes 2=No	1=Yes 2=No	1=Yes 2=No	1=Yes 2=No	1=Yes 2=No	1=Yes 2=No

Member ID	C4.08 Cumulative value of profits earned after joining women's group	C4.09 Cumulative value of wages earned after joining women's group	C4.10 Cumulative value of wages earned from women's group

Member ID	C4.11 Number of meetings attended	C4.12 Number of times contributed to savings	C4.13 Average savings amount	C4.14 Cumulative savings amount	C4.15 Ever Demanded loan from women's group	C4.16 Ever received loan from women's group	C4.17 Number of loans received	C4.18 Total value of loans received
					1=Yes 2=No	1=Yes 2=No		

Member ID	C4.19 Ever demanded livelihood grant from women's group	C4.20 Ever received livelihood grant from women's group	C4.21 Number of livelihood grants received	C4.22 Total value of livelihood grants received	C4.23 Ever provided training to other women's groups	C4.24 Location of training provided	C4.25 Did you receive compensation for giving the training?	C4.26 How much compensation?
	1=Yes 2=No	1=Yes 2=No	Number	Local currency	1=Yes 2=No	Provide location codes based on context	1=Yes 2=No	Local currency

Source: 3ie evaluation of the NRLM (adapted)<sup>122</sup>

**Table C-5. Survey Questions to Measure Social Cohesion**

Survey Questions	Responses
<b>Group Cohesion: Sense of Belonging: How much do you agree or disagree with the following statements?</b>	
C5.01 I feel that I belong to this savings group	1 = Strongly agree 2 = Agree 3 = Disagree 4 = Strongly disagree
C5.02 I would rather be with a different savings group	
C5.03 I would prefer this savings group over any others I know of	
C5.04 Members of this savings group are all striving for the same goals	
C5.05 Everyone in our savings group wants to pursue their own goals rather than working for the good of the savings group	
C5.06 I can count on fellow savings group members if I need to borrow money	
C5.07 I can count on fellow savings group members to accompany me to the doctor or hospital	
C5.08 I can count on fellow savings group members to talk to about my problems	
C5.09 Savings group members worry about only themselves	
C5.10 I can count on fellow savings group members if I need advice	
C5.11 I can count on fellow savings group members to help me in accessing services	
C5.12 I can count on fellow savings group members to help me address the problems I am unable to solve on my own. (e.g., violence)	
<b>Group Cohesion: Network Cohesion</b>	
C5.13 When you have a problem or worry, how often do you let someone else in the savings group know about it?	1 = Never 2 = Rarely 3 = Usually 4 = Always
<b>Collective Efficacy: If there were problems that affected all or some of the group members, how many women would work together to deal with the problem?</b>	
C5.14 From your own savings group?	1 = No one 2 = Some women 3 = Most women 4 = All women
C5.15 Women in the village but not from savings group?	1 = No one 2 = Some women 3 = Most women 4 = All women

Source: Population Council study on the impact of Parivartan and the Uttar Pradesh Community Mobilization Project (Adapted)<sup>123</sup>

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