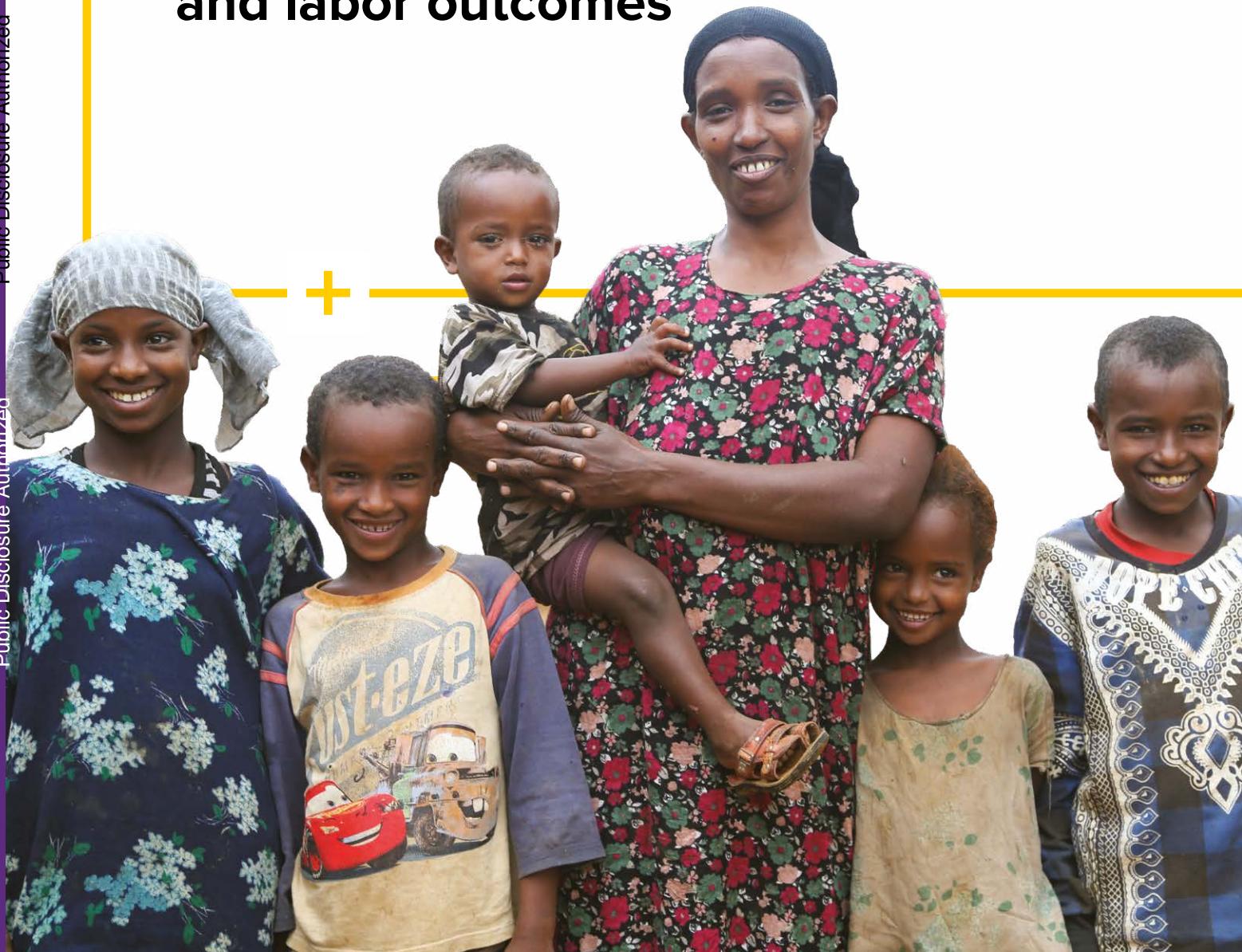


# LSMS+ Program

**Overview and recommendations  
for improving individual-disaggregated  
data on asset ownership  
and labor outcomes**



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#### **Living Standards Measurement Study (LSMS)**

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# Summary

The World Bank Living Standards Measurement Study-Plus (LSMS+) program has been established in 2016 to improve the availability and quality of individual-disaggregated survey data collected in low- and middle-income countries on key dimensions of men's and women's economic opportunities and welfare. This document presents an overview of the LSMS+ program, in the context of the increased momentum around improving data on men's and women's economic opportunities in surveys and provides operational guidance regarding individual-disaggregated data collection in national household surveys. The thematic focus of the guidance is on asset ownership and labor-related data collection, and it is anchored in the experience with the LSMS+ supported national household surveys and in the available international guidelines on survey data collection on these topics. The aim is to inform national statistical offices, survey practitioners and international partners regarding **(i) the importance of collecting self-reported data on men and women, and (ii) the steps taken to effectively implement the recommended questionnaire modules in face-to-face surveys.**<sup>1</sup>

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<sup>1</sup> Guidance from the Intersecretariat Working Group on Household Surveys on implementing face-to-face surveys while following proper COVID-19 safety protocols can be found here: <http://bit.ly/covidsafetyprotocols>.

# 1.

## Introduction

The targeting and design of successful economic policies — to create employment opportunities, expand access to financial services and enhance access to capital and technology — rely on an accurate understanding of economic roles and choices of men and women. Programs tied to land reforms and expansion of financial services, for example, can benefit from a more nuanced understanding of household members' roles as owners or managers of assets, given the links between ownership and control of assets on individuals' ability to make productivity-enhancing investments, cope with negative economic and health shocks,<sup>2</sup> and influence household decisions such as expenditures.<sup>3</sup> Similarly, a clearer picture of the intra-household distribution of labor — across sectors, wage- or self-employment activities, and unpaid work — can better inform targeting of employment and training programs. Women, in particular, have faced substantial constraints to seeking economic opportunities on par with men. **The most promising source of data to analyze these issues and their interactions are multi-purpose household surveys but their reliability at the intra-household level is limited because of standard respondent selection protocols and questionnaire design. Improving traditional household-level survey approaches to better understand the economic realities faced by men and women within households has an important role in narrowing these inequalities, and in turn more equitable policymaking.**<sup>4</sup>

<sup>2</sup> Michael Carter and Chris Barrett. 2006. "The economics of poverty traps and persistent poverty: An asset-based approach." *The Journal of Development Studies*, 42.2, pp. 178–199.

<sup>3</sup> Assets can include, for example, land, housing, bank accounts, livestock, and other household durables. See, for example, Agnes Quisumbing, Neha Kumar, and Julia A. Behrman. 2018. "Do shocks affect men's and women's assets differently? Evidence from Bangladesh and Uganda." *Development Policy Review*, 6, pp. 3-34.

<sup>4</sup> Shelly J. Lundberg, Robert A. Pollak and Terence J. Wales. 1997. "Do Husbands and Wives Pool Their Resources? Evidence from the United Kingdom Child Benefit." *Journal of Human Resources* 32(3): 463-480; and Agnes R. Quisumbing and John Maluccio. 2000. "Intrahousehold allocation and gender relations: new empirical evidence from four developing countries." IFPRI FCND Discussion Paper No. 84.

**Standard respondent selection and questionnaire design can limit the reliability of multi-purpose household surveys**



## **Box 1. SDG targets and indicators requiring individual-level data on economic outcomes**

### **Goal 1. End poverty in all its forms everywhere**

**Target 1.2** / By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions (also Target 1.1 on eradicating extreme poverty for all).

**1.2.1** / *Proportion of population living below the national poverty line, by sex and age.*

**Target 1.4** / By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including micro-finance.

**1.4.2** / *Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure.*

### **Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture**

**Target 2.3** / By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

**2.3.1** / *Volume of production per labor unit (day) by classes of farming/pastoral/forestry enterprise size.*

**2.3.2** / *Average income of small-scale food producers, by sex and indigenous status.*

### **Goal 5. Achieve gender equality and empower all women and girls**

**Target 5.4** / Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.

**5.4.1** / *Proportion of time spent on unpaid domestic and care work, by sex, age and location.*

**Target 5.a** / Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

**5.a.1** / *(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure.*

**Target 5.b** / Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

**5.b.1** / *Proportion of individuals who own a mobile telephone, by sex.*

### **Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

**Target 8.3** / Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-,

small- and medium-sized enterprises, including through access to financial services. **8.3.1** / *Proportion of informal employment in non-agriculture employment, by sex.*

**Target 8.5** / By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

**8.5.1** / *Average hourly earnings of female and male employees, by occupation, age and persons with disabilities.*

**8.5.2** / *Unemployment rate, by sex, age and persons with disabilities.*

**Target 8.6** / By 2020, substantially reduce the proportion of youth not in employment, education or training.

**8.6.1** / *Proportion of youth (aged 15–24 years) not in education, employment or training.*

**Target 8.10** / Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

**8.10.2** / *Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider.*

### **Goal 10. Reduce inequality within and among countries**

**Target 10.2** / By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

**10.2.1** / *Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities.*

Furthermore, monitoring progress towards several targets of the Sustainable Development Goals (SDGs), across poverty reduction, agriculture, gender, employment, and inequality, require sex-disaggregated data on asset ownership, labor, time use, and roles in family enterprises (**Box 1**).

Many of these targets are motivated in part by significant economic transitions in developing countries — for example, a growing share of smallholders in agriculture and rising concerns over tenure security<sup>5</sup>, rapid out-migration of labor

<sup>5</sup> Sarah Lowder, Jacob Skoet, and Terry Raney. 2016. “The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide.” *World Development* 87: 16–29.



from rural areas, a high concentration of women in informal employment<sup>6</sup>, and concerns over boosting labor productivity across economic sectors amid these trends. Expanding survey data collection on these topics is also a priority for the World Bank, as expressed through the World Bank's Household Survey Strategy, Gender Strategy, and the 18th replenishment of the International Development Association (IDA18), which committed to launch pilot data collection in at least six IDA countries to "gather direct respondent, intra-household level information on employment and assets."<sup>7</sup>

Against this background, the World Bank Living Standards Measurement Study-Plus (LSMS+) program was established in 2016 to support survey data production and methodological research activities to enhance the availability and quality of individual-disaggregated survey data collected in low- and middle-income countries on key dimensions of men's and women's economic opportunities and welfare.<sup>8</sup> The LSMS+ is part of

<sup>6</sup> International Labour Organization (ILO), 2018. *Women and Men in the informal economy: A statistical picture (3rd edition)*. Geneva. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_626831.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_626831.pdf)

<sup>7</sup> International Development Association (IDA), 2016. *IDA18 Special Theme: Gender and Development*. World Bank.

<sup>8</sup> For more information on LSMS+, please visit: <https://www.worldbank.org/lsmplus>. LSMS+ has been established with grants from the Umbrella Facility for Gender Equality Trust Fund, the World Bank Trust Fund for Statistical Capacity Building, and the International Fund for Agricultural Development, and is implemented by the World Bank Living Standards Measurement Study (LSMS) Team, in collaboration with the World Bank Gender Group and partner national statistical offices. The program leveraged existing World Bank partnerships with (1) United Nations Evidence and Data for Gender Equality (EDGE) Project on methodological experimentation and international guidelines on measuring asset ownership and control from a gender perspective, and (2) the ILO, FAO, the Data2X Project and the Hewlett Foundation on methodological experimentation for operationalizing the 19th ICLS definitions of work and employment, with a focus on subsistence agriculture.

the Living Standards Measurement Study (LSMS), which over the last four decades, has provided technical assistance to national statistical offices (NSOs) globally on designing and implementing high-quality, multi-topic household surveys. These surveys have been used extensively in policy making and research on a wide range of topics, including poverty, consumption and income inequality, employment, non-farm enterprises, agriculture, education, and health, among others.

In its current phase, the LSMS+ has built off of the multi-topic survey questionnaire design that has been pioneered by the LSMS and has been supporting NSOs in select low-income countries in operationalizing the latest international recommendations for individual-disaggregated survey data collection on asset ownership and labor. The latter involves administration of individual-level survey modules that are administered in private to household members aged 18 and older and that focus on work and employment, non-farm enterprises, and ownership of and rights to selected physical and financial assets, including, at a minimum, dwelling and non-dwelling land, financial assets and mobile phones. The approach of surveying multiple individuals per household captures intra-household dynamics in labor and economic decision-making — the understanding of which is critical for designing policy around improving economic opportunities, particularly for women. Besides data production, the LSMS+ also supports methodological survey research activities to improve the foundations of individual-disaggregated data collection in household surveys.

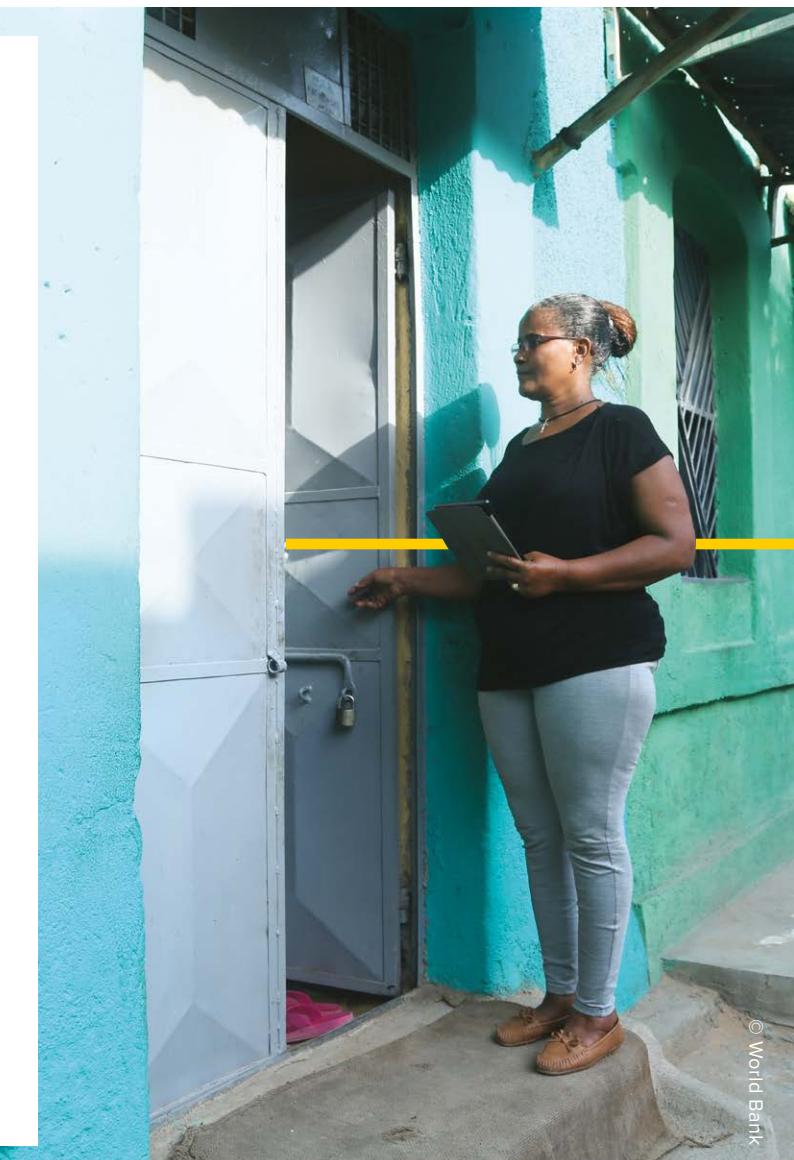
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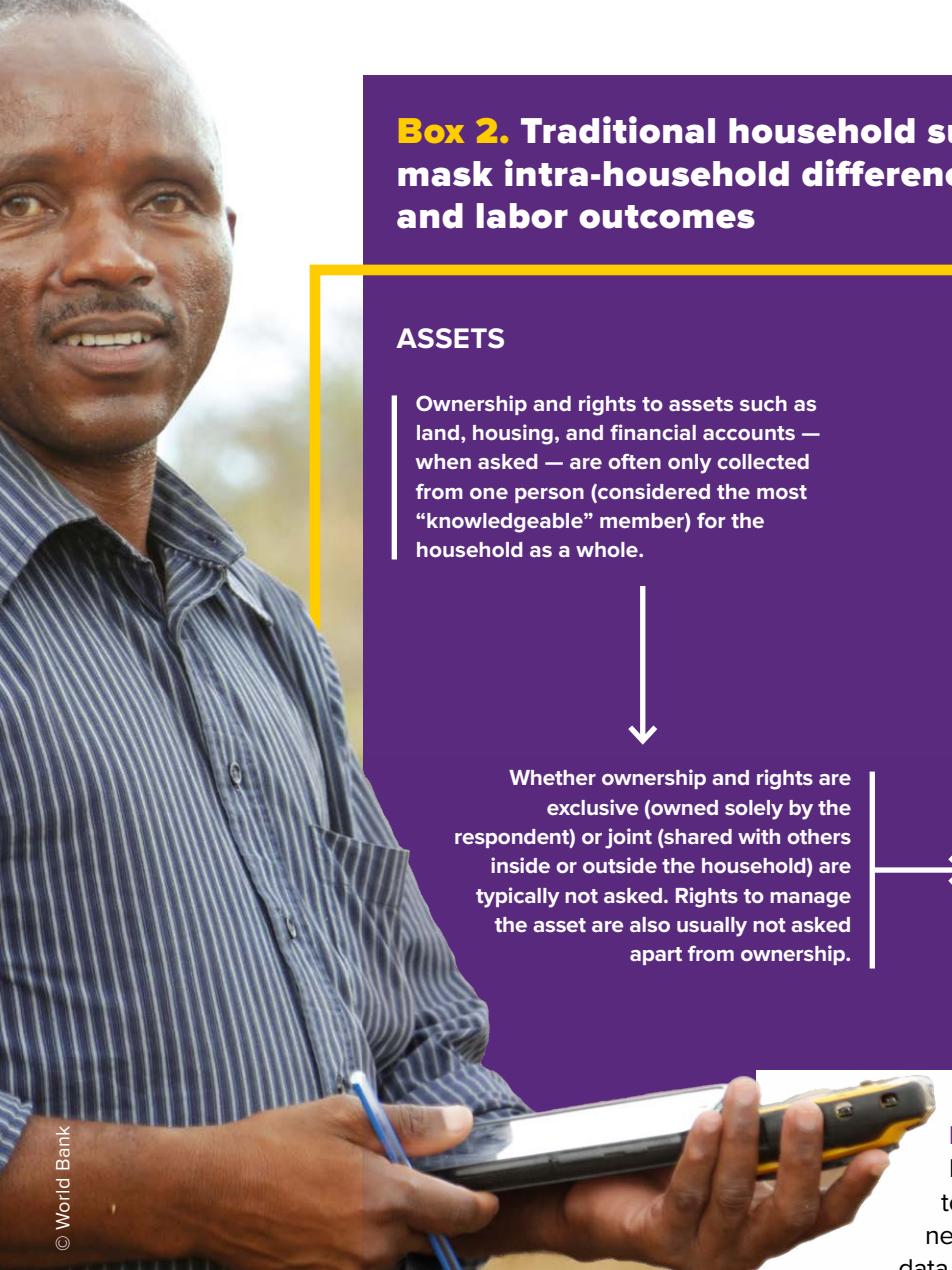
## Shortcomings and momentum in collecting individual-disaggregated survey data on asset ownership and labor outcomes

Among different data sources, nationally representative multi-topic household surveys—covering a range of household-, individual- and community-level outcomes related to demographics, education, employment, consumption, access to infrastructure and services, among others—are well-positioned to monitor different SDG targets on economic opportunities and to support other country efforts to measure individual poverty or deprivation.<sup>9</sup> These surveys cover a breadth of topics that also allow a better understanding of how economic status and opportunity are associated with different factors such as age, education, marital status, health. Nationally representative surveys can also allow for cross-country comparability of statistics if there is international agreement on standardized modules and survey methodologies.

However, **multi-topic household surveys can obscure intra-household and gender differences in asset ownership and labor outcomes due to the standard of practice in questionnaire design and respondent selection.** For instance, proxy respondents have typically been used to collect information on behalf of other household members and even when self-reported information

<sup>9</sup> See, for example, Caitlin Brown, Martin Ravallion, and Dominique van de Walle. (2019). “Most of Africa’s Nutritionally-Deprived Women and Children are Not Found in Poor Households.” *Review of Economics and Statistics* 101(4): 631-644;





## Box 2. Traditional household survey approaches that mask intra-household differences on assets ownership and labor outcomes

### ASSETS

Ownership and rights to assets such as land, housing, and financial accounts — when asked — are often only collected from one person (considered the most “knowledgeable” member) for the household as a whole.



Whether ownership and rights are exclusive (owned solely by the respondent) or joint (shared with others inside or outside the household) are typically not asked. Rights to manage the asset are also usually not asked apart from ownership.



### LABOR

For labor outcomes, proxy reporting (with one or more household members reporting for others) is also common.



This is also the case for family enterprises, where the business manager may not be the person interviewed regarding the enterprise.



Across different outcomes, when respondents do self-report, they may be interviewed in the presence of other household members. This may risk losing information on individuals' views or choices that do not conform with societal norms.

**Box 2** provides a brief overview of the limitations of traditional approaches to data collection on these topics. The negative effects of proxy reporting on data accuracy are further magnified in

lower-income contexts that are characterized by **(i) extensive seasonal and/or informal employment that is already difficult to measure** and **(ii) social norms or legal/regulatory barriers that can impact how proxy respondents provide information on other household members' economic roles and ownership of and rights to assets.**<sup>10</sup>

is obtained, these interviews may not be conducted in private. Logistically it is easier and less time- and cost-intensive for an enumerator to approach a household and interview a single person without scheduling around the availability of multiple or specific household members. Additionally, there may be more than one household member present during an interview to help provide information or simply because they were present when the enumerator arrived at the household. Depending on the location and size of the dwelling, it may be difficult to find a quiet and private space to interview a respondent, and cultural practices may make it difficult for an enumerator to interview respondents alone. It is only the emerging research on the importance of more nuanced approaches to questionnaire design, respondent selection, and interview settings that can motivate additional actions by survey practitioners to move away from the more straight forward standards of practice.

Addressing methodological shortcomings in household surveys has received increased attention within the international statistical and development communities. **Box 3** provides an overview of recent efforts that have culminated in improved survey methods and guidance for data collection on asset ownership and labor outcomes. The adoption of these recommendations is key to enhancing our understanding gender differences in economic opportunities.

<sup>10</sup> See, for example, Gayatri Koolwal. 2019. *Improving the Measurement of Rural Women's Employment: Global Momentum and Survey Research Priorities*. World Bank Policy Research Paper 8840.



### **Box 3. International momentum in improving the measurement of asset ownership and labor outcomes at the individual-level**

#### **Ownership of and Rights to Physical and Financial Assets**



On assets, the Evidence on Data and Gender Equality (EDGE) initiative was launched in 2013 to develop international guidelines on individual-level data collection on asset ownership and entrepreneurship. This also involved field-testing collection methods, including the [Methodological Experiment on Measuring Asset Ownership from a Gender Perspective \(MEXA\)](#) in Uganda (Kilic and Moylan, 2016).<sup>\*</sup> Specifically, MEXA devised questionnaire modules to elicit different types of asset ownership and rights, as well as understand the importance of interviewing respondents individually as opposed to relying on a proxy or “most knowledgeable” household member. Along with EDGE-supported country pilots in six countries informed by findings from MEXA, this work culminated in the [2019 United Nations Guidelines for Producing Statistics on Asset Ownership from a Gender Perspective](#).



A 2019 methodological note by the World Bank, FAO and UN Habitat, [Measuring Individuals' Rights to Land: An Integrated Approach to Data Collection for SDG Indicators 1.4.2 and 5.a.1](#), also targets national statistical offices (NSOs) and other survey practitioners on implementing survey modules to capture these indicators, with a focus on land owned by individuals.

#### **Labor Outcomes**



On labor outcomes, there has been an increased emphasis on eliciting forms of work that typically have been under-collected in household and other employment surveys. This includes improved data collection on men's and women's unpaid work to better understand their total work burdens, as discussed in 2013 recommendations from the [19th International Conference of Labor Statisticians \(ICLS\)](#). The recently-adopted [International Classification of Status in Employment \(ICSE-18\)](#) during the 20<sup>th</sup> ICLS also calls for additional data collection to identify seasonal/temporary workers, as well as other workers with non-standard employment arrangements. In particular, improving data collection at the individual-level is key in these efforts, given that unpaid and temporary work are often at risk of not being collected as well as regular paid work in employment modules, particularly when proxy respondents are used.



The Women's Work and Employment Partnership (WWEP) was launched in 2014 to operationalize the ICLS 19 definitions work and employment and developed a recommended module designed to collect data on paid work and work on own-use production of goods. The module produces headline labor market indicators (i.e. employment rate, labor force participation rate, and unemployment rate) and labor underutilization indicators, as well as new indicators regarding different forms of work.



The 2018 Technical Report on Measuring Entrepreneurship: Lessons Learned from the EDGE Project also discusses recommendations for individual-disaggregated data on entrepreneurship, based on data from the EDGE pilot countries. Guidance will be based on the definition of entrepreneurship in the recently-adopted Resolution I concerning statistics on work relationships of the 20<sup>th</sup> ICLS, as well as ICSE-18 (also adopted under Resolution I), that can help improve cross-country comparability of statistics in this area.

\* Talip Kilic and Heather Moylan. 2016. [Methodological experiment on measuring asset ownership from a gender perspective \(MEXA\)](#): technical report. World Bank.

# 3.

## LSMS+ Program: addressing key individual-disaggregated survey data gaps

### 3.1.

#### LSMS+ Overview

The LSMS+ program supports household survey data production and methodological research activities to improve the availability and **quality of individual-disaggregated survey data** collected in low- and middle-income countries on **key dimensions of men's and women's economic opportunities and welfare**. Since 2016, the thematic focus of the program has been on:

- 1. ownership of, and rights to, selected physical and financial assets,**
- 2. work and employment, and**
- 3. entrepreneurship.**

During this period, LSMS+ has supported NSOs in select low-income countries to follow international best practices related to data collection on these topics in the context of national household surveys.

The emphasis has been to promote the adoption of recommended questionnaire modules on asset ownership and labor outcomes and to minimize the use of proxy respondents while collecting personal information. Besides data production, LSMS+ supports methodological survey research to improve the foundations of individual-disaggregated data collection in household surveys.

LSMS+ has been established with grants from the Umbrella Facility for Gender Equality Trust Fund, the World Bank Trust Fund for Statistical Capacity Building, and the International Fund for Agricultural Development, and has been implemented by the World Bank LSMS Team, in collaboration with the World Bank Gender Group and partner NSOs. The LSMS+ guidance on questionnaire design, sampling design, and fieldwork implementation protocols builds on the World Bank partnerships with (1) United Nations Evidence and Data for Gender Equality (EDGE) Project on methodological experimentation and international guidelines on measuring asset ownership and control from a gender perspective, and (2) the ILO, FAO, the Data2X Project and the Hewlett Foundation on methodological experimentation for operationalizing the 19<sup>th</sup> ICLS definitions of work and employment, with a focus on subsistence agriculture.

Along with a focus on self-reporting, LSMS+ supported surveys have worked towards (i) **conducting individual interviews in private, and if possible simultaneously across different household members**, and (ii) **ensuring as much as possible a gender match between the interviewers and the respondents**.



These practices were in line with those that had been followed by the Methodological Experiment on Measuring Asset Ownership from a Gender Perspective (MEXA) in 2014.<sup>11</sup> In each country that has supported to date, LSMS+ has financed additional survey implementation costs arising from (i) carrying out multiple, direct individual-specific interviews per sampled household; (ii) implementing improved and more conscious approaches to interview scheduling to minimize the reliance on proxy respondents; and (iii) administering detailed questionnaire modules on asset ownership, labor and non-farm enterprises that are anchored in international best practices. In parallel, LSMS+ has provided technical assistance to the NSOs in all facets of survey design and implementation to ensure successful implementation of improved survey methods for collecting the required data.

**LSMS+ supports methodological survey research to improve the foundations of individual-disaggregated data collection in household surveys**

<sup>11</sup> MEXA was implemented by the Uganda Bureau of Statistics, under the partnership between the World Bank LSMS and UN EDGE Project. For more information, see: Talip Kilic and Heather Moylan. 2016. *Methodological experiment on measuring asset ownership from a gender perspective (MEXA): technical report*. World Bank.



## 3.2. LSMS+ Countries

As of December 2020, nationally-representative surveys directly supported by LSMS+ include the 2016 Malawi Integrated Household Panel Survey, 2019-20 Tanzania National Panel Survey, 2018-19 Ethiopia Socio-Economic Survey, 2019-20 Cambodia LSMS+ Survey, the 2021 Sudan Labor Market Panel Survey. In these countries, LSMS+ operations have been piggybacked onto an existing national household survey (**Box 4**). In Nepal, the original plans to conduct LSMS+ supported data collection in collaboration with the Central Bureau of Statistics and piggybacked onto the 2020-21 Nepal Living Standards Survey have been put on hold due to the COVID-19 pandemic and the subsequent suspension of NLSS fieldwork activities. Consequently, in Nepal, LSMS+ will be focused on supporting a phone survey on LSMS+ priority topics, with a focus on interviewing a randomly selected adult household member in each sampled household.

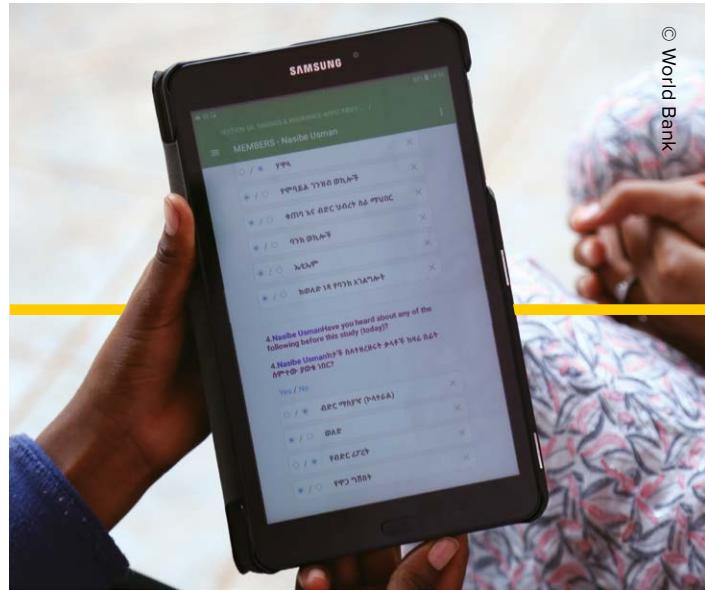
Furthermore, there was some cross-country variation in how recommended LSMS+ modules were implemented. All LSMS+ countries included comparable survey modules on the following asset classes: dwelling and agricultural land,

financial accounts, and mobile phones. Additional asset classes that were included as a function of country-specific relevance are noted in **Box 4**. All countries also included individual-level modules on education, health, and labor and for these modules, enumerators were expected to ask these questions to the individuals themselves as much as possible.<sup>12,13</sup> The content of the labor module in each LSMS+ supported national survey was updated to adhere with the latest recommendations from the WWEP which looks closely at how questionnaires should be phrased to ensure that women's work and employment are captured in a comprehensive fashion.

<sup>12</sup> In the previous rounds of the panel surveys in Malawi and Tanzania, the protocol for these three modules had been to ask questions to individuals themselves. However, there was a more concerted effort to adhere with this protocol during the survey round that the LSMS+ data collection was piggybacked on.

<sup>13</sup> In individual-level modules on education, health and labor, a question was asked at the start of each module asking if the information was self-reported and, if they could not manage to interview the individual, the enumerator identified the household member who reported on their behalf.

Finally, all LSMS+ countries maintained their existing survey modules on non-farm enterprises with some minor revisions to be in line with the recommendations of the LSMS program. The key requirement for data collection on non-farm enterprises was to interview the manager of each enterprise. Additional individual-level modules that were included as a function of country-specific relevance are again noted in **Box 4**.



#### **Box 4. National Surveys Supported by LSMS+**

|   | <b>Malawi</b>  | <b>Tanzania</b>  | <b>Ethiopia</b>  | <b>Cambodia</b>  | <b>Sudan</b>  |
|---|--|--|--|--|---|
| <b>Survey</b>   | 2016 Integrated Household Panel Survey                               | 2019-20 Tanzania National Panel Survey                                     | 2018-19 Ethiopia Socioeconomic Survey  | 2019-20 Cambodia LSMS+ Survey  | 2021 Sudan Labor Market Panel Survey  |
| <b>Implementing agency</b>                                      | Malawi National Statistical Office                                   | Tanzania National Bureau of Statistics                                     | Ethiopia Central Statistical Agency  | National Institute of Statistics of Cambodia   | Sudan Central Bureau of Statistics  |
| <b>Sample size for individual interviews supported by LSMS+</b> | 2,508 households   | 1,184 households   | 6,770 households   | 1,512 households   | 5,000 households  |
| <b>Fieldwork period</b>   | 4/2016- 1/2017   | 1/2019- 1/2020   | 9/2018- 8/2019   | 10/2019- 12/2019   | TBD: 2021   |
| <b>Asset Classes Included in Data Collection</b>                | Agricultural and dwelling land, financial accounts, mobile phones    | Agricultural and dwelling land, financial accounts, mobile phones          | Agricultural and dwelling land, financial accounts, mobile phones, livestock | Agricultural and dwelling land, financial accounts, mobile phones, livestock, apartments/condos, consumer durables | Agricultural and dwelling land, financial accounts, mobile phones, livestock, consumer durables                   |
| <b>Other Topics of Individual-Disaggregated Data Collection</b> | Employment, non-farm enterprises, education, health, food insecurity | Employment, non-farm enterprises, education, health, subjective well-being | Employment, non-farm enterprises, education, health, savings                 | Employment, non-farm enterprises, education, health, 24-hour time use diary; domestic and international migration  | Employment, non-farm enterprises, education, health, 24-hour time use diary; domestic and international migration |

# 4.

## LSMS+ recommendations on individual-disaggregated survey data collection on assets, work, employment, and entrepreneurship

The design and implementation of the LSMS+ modules, across different country contexts, has led to important lessons learned on how individual-level data on asset ownership, labor, and other important outcomes can be improved. While recommendations that are presented in this section build off the experience of the LSMS+ pilot countries, the discussion also tackles how questionnaires and survey implementation can vary in accordance with the specific survey objectives that NSOs and survey practitioners may have.

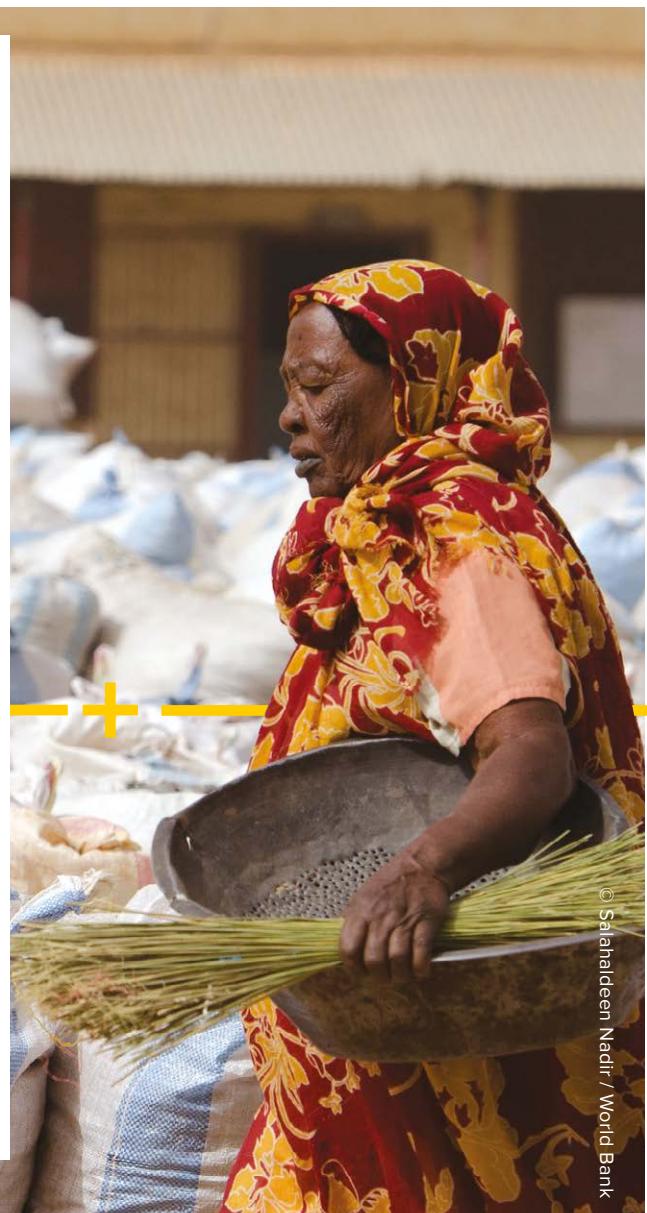
The guidance in this section focuses on face-to-face surveys and focuses on two areas:

### **Respondent Selection and Questionnaire Design.**

This includes (i) targeting the appropriate respondents, and (ii) how to adapt existing modules or design new household survey questionnaire modules to best capture information on the aforementioned topics.

**Planning for Fieldwork Implementation.** This includes (i) the approach and sensitivities related to the interview process and interview setting; (ii) cost considerations when developing the budget (iii) advice for training and fieldwork implementation (iv) designing the data entry application and monitoring data quality.

**Annexes II, III, and IV** provide sample questionnaire modules, content for the enumerator manual, and recommended tabulations for the survey management team to monitor incoming data quality. Specific examples from country experiences and links to additional resources are provided throughout the section.



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## 4.1.

### Respondent selection and questionnaire content

To improve the quality of information on assets, work, employment, and entrepreneurship there are two main components: identifying **(a) who to ask** and **(b) what to ask them**, as these jointly determine the reliability of the data collected.

#### 4.1.1.

##### Individual-level modules on asset ownership and rights

###### 4.1.1.1. Respondent selection

Survey modules on ownership of and rights to assets should be premised on a very basic idea: that **assets can often be owned by multiple individuals, and in other cases only one individual**. As such, a key recommendation is to conduct intra-household and private interviews with all adult household members on their personal ownership of and rights to assets.

In general, the UN EDGE Guidelines, mentioned earlier in **Box 3**, recommend that surveys collect self-reported rather than proxy data on asset ownership. To derive national-level estimates of

**Assets can often be owned by multiple individuals, and in other cases only one individual**

women's and men's asset ownership, including SDG indicators 5.a.1 (a) + (b) and generate statistics that take into account differentials in the characteristics (such as value and size) of assets owned, the Guidelines outlined two main recommendations: **(i) interview one randomly selected adult household member** and **(ii) administer questions at the individual-level or specific to a roster of assets, in each asset class, belonging to the respondent**. If, however, the objective of the survey is not only to accomplish the above but also to **fully capture intra-household gender inequalities in asset ownership**, the Guidelines recommend that surveys obtain a roster of assets, in each asset class, belonging to household members and **interview separately all adult household members**, feeding a common roster of assets into each individual-level interview.

In line with the analytical objectives of the work program, to date, LSMS+ supported surveys have followed the second of the two recommendations – interviewing all adult household members (directly, as opposed to through a proxy).<sup>14</sup> The comparative assessment of the data from the Malawi Integrated Household Panel Survey (IHPS), which was supported by the LSMS+, versus the Fourth Integrated Household Survey (IHS4), has in fact revealed the importance of conducting private interviews with adult household members. Compared with the international best practice of privately interviewing adults about their personal asset ownership and rights (i.e. the IHPS), the business-as-usual approach of interviewing the most knowledgeable household member(s) on adult household members' ownership of and rights (i.e. the IHS4) has been shown to lead to **(i) a higher share of men with exclusive reported and economic ownership of agricultural land, and (ii) a lower share of women with joint reported and economic ownership** (Box 5).

Time and budget constraints can hamper interviewing all adult household members, leading to the risk of nonresponse. However, among the LSMS+ surveys that have been completed so far, response rates have been high among eligible adults. In Malawi, 82 percent of all eligible adults were successfully interviewed. In Tanzania, Ethiopia and Cambodia, the shares of eligible adults who were interviewed were 80, 96, and 92 percent, respectively. Across specific asset modules, for households with non-dwelling land, 95 percent of respondents in Ethiopia were interviewed; these shares were 79 percent in Tanzania and 83 percent in Malawi. The interview rates were somewhat higher for dwelling land in Ethiopia and Tanzania.<sup>15</sup> In Ethiopia, about 96 percent of eligible respondents were interviewed for the mobile phone module, while these shares were 80 percent in Tanzania and 82 percent in Malawi. Overall, the urban-rural differences in interview rates were not very large, but there were substantial gender differences — particularly in Tanzania and Malawi,

<sup>14</sup> In the first LSMS+ country, the Malawi Integrated Household Panel Survey 2016, up to 4 adults were randomly selected for interview in line with the protocol used in MEXA in Uganda. This covered 99 percent of adults in the survey sample. Interviews prioritized the selection of the head of household, and his or her spouse, if working in a couple household, and the rest of the respondents were selected at random. By the second LSMS+ pilot in Tanzania, the survey team decided it was feasible to interview all adults in the survey households due to the change in Survey Design on the Computer Assisted Personal Interviewer software used and discussed in Section 5.

<sup>15</sup> Please refer to the LSMS+ reports on Sub-Saharan Africa and Cambodia for full details on the response rates.

## Box 5. Why does collecting self-reported data in private interviews matter? Evidence from the LSMS+\*

On reporting of agricultural land ownership and rights specifically, evidence using the parcel module from the Malawi LSMS+ (IHPS) underscores the importance of asking individuals within the household directly. Specifically, Kilic, Moylan and Koolwal (2020)'s study compares individual interviews in the IHPS with the concurrently-implemented IHS4's "business-as-usual" approach of interviewing the most knowledgeable household member(s) on adult household members' ownership of and rights. In the IHS4, the "most knowledgeable" respondent was often the head (male or female), but spouses of the head could also be selected. For example, **among those who were most knowledgeable respondents in the IHS4 (across all households), 43 percent were men and 57 percent were women; within male-headed households specifically, about 60 percent of most knowledgeable respondents were men, and 40 percent women.**

As compared to individual interviews in the IHPS, the authors find that the IHS4's business-as-usual leads to **(a) higher reporting among men of exclusive reported and economic ownership of agricultural land, and (b) lower joint reported and economic ownership of agricultural land among women.** Because women were more likely to be selected as the most knowledgeable respondent in the IHS4, a large part of this may therefore be due to women under-reporting their status as opposed to what men report of women household members' status. There are clear gender implications, as a result, of interviewing respondents directly and individually — and distinguishing across different forms of ownership also matters.

\* Talip Kilic, Heather Moylan and Gayatri Koolwal. 2020. "Getting the (Gender-Disaggregated) Lay of the Land: The Impact of Survey Respondent Selection on Measuring Land Ownership and Rights." World Bank Policy Research Working Paper 9151.

where eligible female respondents were much more likely to be available for interviews than eligible men.

Overall, the additional costs of surveying more than one individual in each household can be significant, depending on the level of coordination and planning among the survey team. Box 6 provides an assessment of the additional budget and time requirements for the Malawi LSMS+ experience to assist survey practitioners in budgeting for their survey operation.



## Box 6. Cost implications of interviewing multiple household members

To get a better understanding of the additional costs of implementing individual interviews, the metadata extracted from Survey Solutions allows for calculations of the number of days field teams spent in an enumeration area (EA). In Malawi, field teams were made up of one team supervisor and four enumerators to carry out interviews for 16 households per EA. The IHPS is unique among the LSMS+ surveys conducted thus far, in that it ran concurrently with the Malawi Fourth Integrated Household Survey, or IHS4, which carried out the business-as-usual approach of interviewing “most knowledgeable” household member(s) regarding asset ownership, allowing for a side-by-side comparison of the approaches. **On average field teams spent approximately 3.4 days in an IHS4 EA, with one enumerator visiting each household. The same field teams spent an average of 4.5 days in an IHPS EA, which involved interviewing, if possible simultaneously, up to four adults in each household.**

### 4.1.1.2. Questionnaire content

The UN EDGE Guidelines recommend that countries collect information, at a minimum, on the principal dwelling, agricultural land, and other real estate as this “core” set of assets has been found to comprise the majority of personal wealth. Additionally, they advise countries to determine additional assets (including non-agricultural enterprise assets, livestock, large and small agricultural equipment, financial assets and liabilities, valuables, and consumer durables such as vehicles) to collect data on based on the policy needs and prevalence of assets within the country.

In line with these recommendations, LSMS+ surveys have focused on the following asset classes on a cross-country basis: **(a) non-dwelling land parcels<sup>16</sup>** and **dwelling land; (b) financial accounts** and **(c) mobile phones.** Survey practitioners should carefully consider the asset classes they include in their survey operation for those most relevant to the country context. It may be necessary to consider expanding data collection efforts to other relevant asset classes, as was done in Ethiopia and Cambodia in the context of the LSMS+ program.<sup>17</sup>

<sup>16</sup> A parcel is defined as a continuous piece of land which can have more than one plot.

<sup>17</sup> The individual-level ownership of durables (computers, motorized and non-motorized vehicles, and tractors) is asked in the Cambodia questionnaire, and the ownership of livestock is covered in Ethiopia and Cambodia. For consumer durables, in Cambodia, only whether the individual owned durables across computers and vehicles was asked, but not exclusive or joint ownership.

**The LSMS+ recommended survey modules on asset ownership make a concerted effort in differentiating between respondents' exclusive versus joint reported ownership of each asset in a given asset class.** In the case of joint reported ownership, other joint owners, both within and outside the household, are identified uniquely (for example by specifying unique household roster identifiers for other joint owners that are household members).

In addition, questions on documented ownership, economic ownership, and rights to sell, bequeath, rent, use as collateral, and invest are included depending on the asset class in question. These additional questions also differentiate between respondents' exclusive versus joint ownership and rights and identify joint owners and rights holders for each asset in line with the approach above.

This level of detail highlights important patterns of ownership and decision-making that can inform policy efforts to expand access to financial services, land, and property rights in general.

**Box 7** presents the series of recommended parcel-level questions to capture ownership of and rights to land. These apply to both non-dwelling and dwelling land. For financial accounts, mobile phones, and livestock, respondents should be asked about whether they owned these assets exclusively or jointly with others (and, if jointly, with which other household members). Additional notes are provided below on the LSMS+ priority asset classes. The sample asset modules on land, other real estate, livestock, durable assets, mobile phones, and financial accounts are provided in **Annex I** and the accompanying Interviewer Manual is provided in **Annex II**.

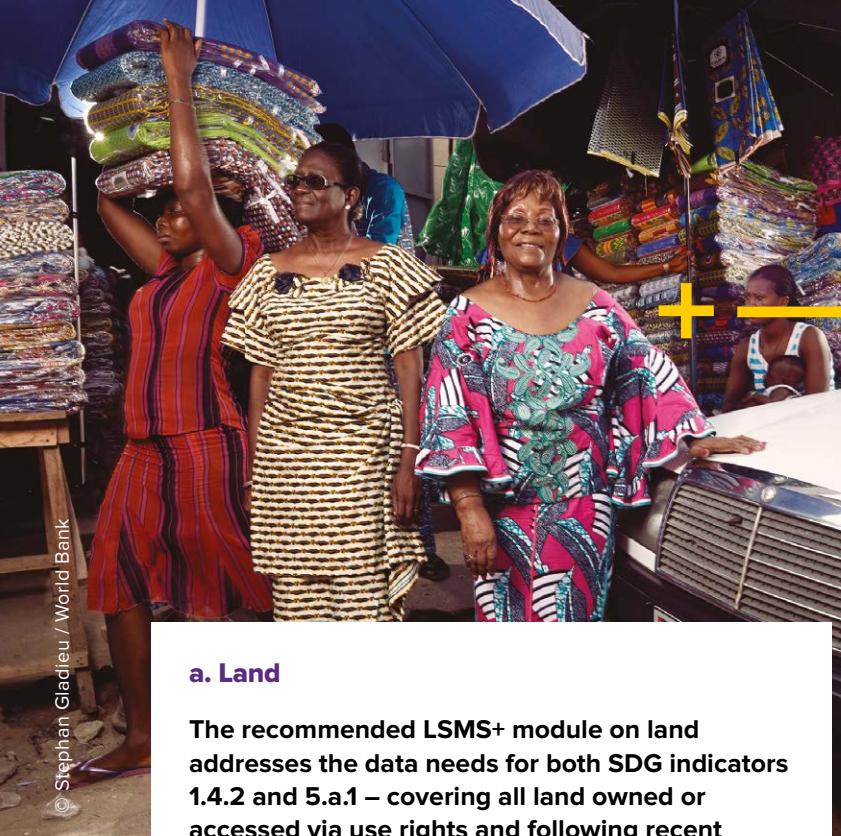
## Box 7. LSMS+ questions over land ownership and rights (non-dwelling and dwelling), as well as decision-making

| Reported owner  | Economic owner   | Documented owner   | Rights <sup>1</sup>   | Decision-making <sup>2</sup>   |
|---|--|--|---|--|
| Do you own this PARCEL, either alone or jointly with someone else?<br><i>(If jointly, list others – up to three members from HH roster<sup>3</sup>)</i> | If this PARCEL were to be sold today, would you be among the individuals to decide how the money is used?<br><i>(If others also involved, list up to three members from HH roster)</i> | Does your household have a document for this PARCEL, such as an application receipt, land investigation paper, certificate (title) from the government, paper from local authority, lease or rental contract?<br><br>Are you listed on the title or ownership document as owner of this parcel?<br><i>(If others also listed, name up to three members from HH roster)</i> | With regard to this PARCEL, are you among the individuals who have this right, even if you need to obtain consent or permission from someone else?<br><br>If yes, do you need permission or consent from anyone else ( <i>name those members</i> )? | Are you among the decision-maker(s) on this PARCEL regarding the timing of crop activities, crop choice, and input use?<br><br><i>(if others also involved, list up to three members from HH roster)</i> |

<sup>1</sup> Questions on rights are asked separately for rights to sell, bequeath, use as collateral, rent out, and make improvements/invest in it.

<sup>2</sup> Parcels identified and rostered first in the household questionnaire are carried forward to individual interviews. Decision-making over agricultural parcels is also asked of respondents, as well as perceived tenure security.

<sup>3</sup> The LSMS+ countries all allowed for three additional members, however in countries with larger household sizes or with a higher incidence of polygamy survey practitioners may want to consider increasing this number.



## Box 8. Measurement issues with interviewing multiple household members regarding asset ownership and control

On potential reporting discrepancies within the household from interviewing multiple individuals within the household, the LSMS+ modules in fact found a relatively high degree of intra-household agreement (although cases of disagreement were not negligible). Focusing on spouses' reports of ownership and rights (versus any type of documented ownership) over land, for example, **couples agreed on reported ownership of around 90 percent of non-dwelling parcels and 85 percent of dwelling parcels** (accounting for whether spouses agreed on exclusive or joint ownership/rights). **These shares were 75 and 71 percent of non-dwelling and dwelling parcels, respectively, for Tanzania, and 71 percent for reported ownership of non-dwelling parcels in Malawi** (ownership and rights to dwelling land were not asked in the Malawi IHPS). **In Cambodia, couples agreed on reported ownership of about 95 percent of non-dwelling as well as dwelling parcels.**

Where present, intra-household disagreement can also reveal important information relevant for policy targeting. Using the Malawi LSMS+, for example, Kilic, Moylan and Koolwal (2020) found that women's decision-making over agricultural activities was positively associated with their attributing at least some reported land ownership to themselves, even if their husbands reported that their wives do not own land.<sup>1</sup>

<sup>1</sup> Recent work by Annan et. al (2020) using Demographic and Health Surveys (DHS) from 23 countries in Sub-Saharan Africa has also found that while men and women agreeing on joint decision-making over large household purchases leads to better well-being outcomes for women and children, specific cases of disagreement — i.e., where women claim greater decision-making power over large household purchases than their husbands assign to them, as opposed to vice versa — is associated positively with women's reproductive health and children's health, but negatively for emotional violence.

### a. Land

**The recommended LSMS+ module on land addresses the data needs for both SDG indicators 1.4.2 and 5.a.1 – covering all land owned or accessed via use rights and following recent recommendations in 2019 by the Food and Agricultural Organization (FAO), the World Bank, and UN Habitat.<sup>18</sup>**

Regarding land, the LSMS+ recommendation is to first create a roster of parcels as part of the household interview. The roster should include all parcels used, owned, or accessed via use rights by any household member, irrespective of use (i.e. including agricultural, residential, pastoral, forest, commercial parcels). **This roster should be created with participation from as many household members as possible to ensure completeness of the roster.**

Once completed, the same roster of parcels should be fed forward into the individual questionnaire so that each selected respondent is referring to the same piece of land and asset-level analysis is possible. The parcel rosters in individual interviews should also allow for respondents to report additional parcels that may not have been listed during the household interview, should they be identified by the respondents.

The scope and phrasing of the questions included in the parcel-level module that is then administered in each individual interview should match the approach in the minimum-required parcel-level module<sup>19</sup> that has been developed by the World

Bank, the FAO, and the UN Habitat to allow for the joint computation of the indicators 1.4.2 and 5.a.1.<sup>20</sup> By asking respondents about ownership and rights over specific land parcels, within-household discrepancies can also be better understood. **Box 8** gives insight into the measurement issues that may arise with conflicting reports within the household, that could, for example, hamper an understanding of who are the true owners and rights holders of assets. Within the LSMS+ surveys, a high degree of intra-household agreement was observed on land ownership across countries, although cases of disagreement were not negligible.

<sup>18</sup> The World Bank, FAO and UN Habitat (2019). *Measuring Individuals' Rights to Land: An Integrated Approach to Data Collection for SDG Indicators 1.4.2 and 5.a.1*.

<sup>19</sup> The LSMS+ recommendations follow Version 2 of their recommended land modules.



### b. Financial accounts, mobile phones and other assets

The LSMS+ recommended modules on financial accounts and mobile phones cover SDG indicators 8.10.2 and 5.b.1, respectively, as listed in **Box 1**. For financial accounts specifically, each individual should be asked separately to create a roster of financial assets that is exclusively or jointly owned by the respondent. This creates the potential for non-unique identification of assets across the respondents of the same household either because the assets were hidden from some household members or the assets were omitted by the respondent(s), intentionally or unintentionally. For each financial asset, in case of joint ownership with another household member, the household roster identifier for the joint owner should be recorded.

**Regarding mobile phones and other remaining non-financial asset classes, including livestock and non-land real estate, the recommendation is to first create a roster of assets owned by any household member and then feed forward the same roster into the individual questionnaire** that is administered in private to different household members. Although the sample questionnaire modules in **Annex I** provide sample asset rosters, while determining the list of assets to include for each asset type, survey practitioners should carefully consider the country context and assets included in already existing national surveys for their country along with the assets that contribute the most to personal wealth in a particular context.

### 4.1.2.

## Individual-level modules on education, health, labor, and non-farm enterprises

### 4.1.2.1. Respondent selection

The key LSMS+ recommendations are to:

- a. prioritize self-reporting over the use of proxy respondents for survey data collection on education, health, and labor, and
- b. interview at least one of the associated managers for each enterprise listed in the household non-farm enterprises survey module.

Proxy reporting for individual-level modules is quite common across surveys. For example, as part of the World Bank LSMS-Integrated Surveys on Agriculture (LSMS-ISA)-supported surveys that preceded the LSMS+ program, the share of individuals in the 15-64 age group for whom labor-related survey data were provided by a proxy respondent was 24 percent in the 2012-13 round of the Tanzania National Panel Survey and 2015-16 round of the Nigeria General Household Survey-Panel; around 45 percent in the 2016 round of the Integrated Household Panel Survey and the 2014 round of the Niger ECVM/A Survey; 56 percent in the 2013-14 round of the Uganda National Panel Survey, and 82 percent in the 2014 round of the Mali EAC-I survey.<sup>21</sup> A comprehensive review conducted by the ILO shows that in half of country labor force surveys conducted globally, individual-level data are reported by a proxy 30 to 50 percent of the time (ILO, 2018).<sup>22</sup>

<sup>21</sup> Authors' calculations.

<sup>22</sup> 19<sup>th</sup> ICLS implementation: National LFS practices and implementation plans. 2018. Presentation prepared for the 20<sup>th</sup> ICLS. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms\\_646789.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_646789.pdf)

For education, health, and labor, the LSMS+ has been putting a heavy emphasis on the administration of the related survey modules to age-eligible individuals themselves. However, since national surveys that readily include individual-level modules on these topics require information to be collected for every individual, a degree of proxy reporting is still possible if age-eligible respondents are not available within the time frame that mobile survey teams cover a given enumeration area. As such, in LSMS+ supported surveys, the survey modules on education, health and labor did include a question on whether the respondent was reporting for himself/herself, and a separate question that was asked conditional on the use of a proxy and that uniquely identified the household member that was reporting on behalf of a given individual. This protocol was in contrast with the protocol followed for the survey modules on assets, which were NOT administered to proxy respondents in view of the objective of collecting information on personal ownership of and rights to physical and financial assets.

The incidence of proxy reporting in survey data on education, health and labor have been similar across the LSMS+ supported surveys to date.<sup>23</sup> Focusing on labor, while there was a degree of proxy reporting in Malawi, Tanzania and Ethiopia, it was substantially lower than the levels observed in the comparator LSMS-ISA-supported surveys in these countries.<sup>24</sup> For instance, the incidence of proxy reporting in labor data on adults as part of the LSMS+ supported IHPS 2016 was 21 percent for men and 11 percent for women. The comparable estimates were 48 percent for men and 29 percent for women for the IHS4 2016-17 that was implemented concurrently with the IHPS 2016. **Box 9** provides additional evidence from Malawi based on the comparisons of these two surveys, to show why self-reporting matters in understanding labor market outcomes across men and women.

In general, additional survey questions on whether respondents self-report, and (in the case of a proxy response) the household roster identifier of the proxy, should be included more broadly in household survey modules on education, health, and labor. This can help shed light on whether there is a systematic association between proxy response and reporting of specific outcomes across education, health and labor, as well as how individual characteristics of proxies (age, gender, household relation) may also be associated with reporting of household members' outcomes.

<sup>23</sup> Refer to full LSMS+ reports on Sub-Saharan Africa and Cambodia for the full details on response rates.

<sup>24</sup> In the Cambodia LSMS+, nearly all respondents (90 percent of men, and 95 percent of women) self-reported in the labor module.

For non-farm enterprises, LSMS+ recommendations are to first create a roster of household enterprise be rostered, and to collect information on each enterprise from the associated manager (or one of the available managers in the case of jointly managed enterprises). Furthermore, in computer-assisted personal interviewing applications, there should be data quality controls that are embedded into the module on non-farm enterprises and that flag any the internal inconsistency between this module and the individual-level module on labor regarding household members that are enterprise laborers.

## **Box 9. Why does collecting self-reported labor data matter? Evidence from the Malawi LSMS+<sup>1</sup>**

Using the data from the LSMS+ supported Malawi IHPS 2016 and the concurrent IHS4 2016-17, Kilic, van den Broeck, Koolwal and Moylan (2020) find that, compared to individual interviews for labor data collection, the business-as-usual practice of relying on a combination of self-reporting, proxy-reporting, and non-private interview settings leads to significant underreporting of employment across different self-employed and wage activities. Stronger effects are observed for women, and for labor market outcomes with a longer (12-month) recall period. The study finds that proxy reporting is an important contributor to underreporting, likely because proxy respondents have less knowledge about other members' activities. For example, **among IHS4 respondents who had a proxy reporting for them, women's ownership/management of a non-farm enterprise employment was 6 percent less over the last 7 days compared to the IHPS, and 9 percent lower over the last 12 months. Among those who self-reported in the IHS4, these reductions relative to the IHPS were 2 and 3 percent, respectively.**

The authors also discuss how the IHS4 respondents may have faced greater difficulties in interpreting and reporting on concepts related to businesses or enterprises, because of less time spent with enumerators (as evidenced by greater discrepancies in the IHS4, compared to the IHPS, in reporting in the standard survey across the labor and non-farm enterprise modules). Furthermore, the extent of under- and over-reporting is systematically associated with household wealth (greater under-reporting of non-farm enterprise employment for the highest wealth quintile, for example), highlighting the importance of respondent selection on specific socioeconomic subgroups as well as by gender.

<sup>1</sup> Talip Kilic, Goedele van den Broeck, Gayatri Koolwal, and Heather Moylan. 2020. "Are you being asked? Impacts of respondent selection on measuring employment." World Bank Policy Research Working Paper 9152.



#### **4.1.2.2. Questionnaire content**

This section focuses on the content for the recommended survey modules on labor and non-farm enterprises. In the case of education and health, outside of systematically adding a question identifying the respondent for each individual, the LSMS+ modules on these topics followed the structure and content of the national survey in each LSMS+ country.

In multi-topic socioeconomic surveys like the LSMS, questions on work and employment typically appear in:

- a. an individual-level labor module that covers a wide range of work and employment outcomes**, including participation in wage and self-employment activities, hours worked in the last week, earnings, unemployment and job search; and
- b. a separate non-farm enterprise module** covering more detailed outcomes on family enterprises.

The recommended LSMS+ survey module on labor follows the 19<sup>th</sup> ICLS recommendations on collecting data on work and employment — inclusive of questions on time spent in non-market work such as collecting water and fuel, food processing, child care and domestic activity, intended use of

any agricultural production (whether for market or own use), along with paid work/employment. The recommended module was developed by the Women's Work and Employment Partnership, as discussed in **Box 3**. Since the LSMS+ data collection was tied to an ongoing survey operation in each country, although the country teams updated their labor modules to ensure that they were in line with the latest recommendations, it was also important for country programs to be sure that statistics generated from this module were comparable to previous waves. Because of this, labor modules differ slightly across countries. However, all countries have been encouraged to include the following **(a) 7-day employment screening questions for different activities; (b) a question on the intended destination of agricultural production** (market or own use); **(c) questions on unemployment and job searching over the last 30 days; (d) information on primary and secondary wage jobs over the last 12 months; and (e) information on whether individuals are searching for more or different work.**

Non-farm enterprise modules should contain questions on basic enterprise attributes, seasonality in enterprise operations over the last 12 months, all household and hired labor inputs over the last month, and profits, revenues, costs from the last month.



## 4.2. Interview Flow

Following the recommendations outlined above on respondent selection and questionnaire content, the desired interview flow (i.e. the order in which questionnaire modules are administered to elicit self-reported data from adult respondents) should be assessed critically.

In a standard LSMS-style survey, questionnaire modules on education, health, and labor are administered at the individual-level immediately following the household roster, and respondents are encouraged to complete all three topics for one household member at a time. Modules eliciting information on asset ownership typically come later in the interview; are asked of “most knowledgeable household members; and contain limited information collected on intra-household ownership and rights.

Based on the LSMS+ recommendations, each adult household member needs to provide information regarding their own education, health, labor, ownership of and rights to physical and financial assets, and report information on non-farm enterprises that they own or manage. Additionally, they should be a part of the discussion creating household-level rosters of land and other applicable assets, such as livestock and non-land real estate.

After collecting the basic household identification information and creating the household member roster, at a minimum, modules that aim to create a comprehensive roster of assets that are owned by any household member need to precede asset modules that are administered to adult household members in private and that rely on the rosters of assets that are created as part of the household interview. Furthermore, there needs to be a mechanism to ensure that each target respondent provides all information that is required of them – especially if the modules requiring self-reported information are interspersed throughout the questionnaire. Survey practitioners must consider what is best for their survey operation but the experience in the LSMS+ supported surveys provide possible options to consider.

**The order in which questionnaire modules are administered to elicit self-reported data from adult respondents should be assessed critically**

Malawi, for example, created an individual questionnaire that was administered separately from the main household and agriculture questionnaires. Essential information from the household instrument was carried forward to each individual interview and in cases where an adult household member was not available for interview, a proxy respondent recorded their education, health, and labor in the main household instrument. Tanzania, on the other hand, incorporated all asset modules immediately following the education, health, and labor modules. This also required that they move the roster of land from the agriculture questionnaire up to the start of the household questionnaire. The Cambodia LSMS+ questionnaire was the closest to a stand-alone survey operation and lays out clearly the set of household-level asset modules that must precede the individual-level asset modules questionnaire. The final consideration is the household enterprise module. It may be best to ask for the enterprise managers early in the household questionnaire to confirm the individual(s) expected to fill this module.

## 4.3.

# Interview Implementation Protocol

To the maximum extent possible, survey practitioners should **(a) conduct individual interviews in private, and if possible, simultaneously, or consecutively**, to avoid the transfer of information between the multiple respondents **(b) ensure a gender match between interviewers and respondent**. It is critical that the individual respondents are interviewed alone and at the end of each questionnaire module, enumerators should record information on the interview setting.

**The UN EDGE Guidelines recommend that individual-level interviews be conducted while the respondent is alone due to the sensitivity of questions on asset ownership and wealth to avoid potential biases in having others present.** Additionally, the UN EDGE Guidelines recommend that individual interviews in a selected household should take place consecutively to avoid any transfer of information or discussion regarding the questionnaire content between survey respondents in a household. The MEXA experiment conducted in Uganda attempted to interview individuals simultaneously as did several of the EDGE pilot countries, however the UN EDGE Guidelines recognized the difficulty of achieving this in practice and settled on consecutive interviews with no opportunity for contamination between interviews.

Finally, the UN EDGE Guidelines suggest that survey practitioners should consider the gender of enumerators assigned to interviews. In MEXA, gender match-up between enumerators and respondents was encouraged based on previous qualitative fieldwork conducted by some of the experts in Uganda on gender and land rights that were involved in the project. The work showed that respondents may be more comfortable disclosing such personal information – hidden assets, financial accounts, etc. - about themselves to enumerators of the same sex. The EDGE Guidelines acknowledge, however, that though this may be the case in many country contexts, in others it may be less safe for female enumerators to be part of the field staff and travel alone. Additionally, Survey practitioners should weigh the costs and benefits of gender match-up based on the country context and also consider the fieldwork set-up and the feasibility of

assigning at least one male and female enumerator to a household given the logistics involved and the potential time and cost implications of doing so. Given the fieldwork set-up in each of the LSMS+ countries, only Malawi and Cambodia attempted to achieve gender match-up between enumerators and respondents. In Malawi 80.7 percent of male respondents were paired with male enumerators and 73.2 percent for female respondents.

The LSMS+ program required interviews to be conducted alone in all pilot countries and required the enumerator to report whether the respondent(s) was alone at the end of each module and, if not, they had to identify the gender and age range (adult versus child) of the person(s) witnessing the interview. The implementation protocol regarding simultaneous versus consecutive interviews for households with multiple adult individuals, however, varied across the countries depending on the flexibility of the fieldwork organization. Simultaneous interviews were possible only in Malawi and Cambodia where there was scope for deploying multiple enumerators in each household.

While trying to meet these objectives, survey practitioners should consider constraints they may face in the country as well as the set-up of the survey they are implementing, and the level of flexibility afforded to the effort. The Malawi, Tanzania, and Ethiopia LSMS+ surveys which were all integrated into the latest rounds of the LSMS national multi-topic household surveys used the already existing field teams to conduct the interviews so the LSMS+ program had less control over the staff selection process. In Ethiopia the survey employs resident enumerators to cover one enumeration area each in rural area, while in Tanzania they select field staff from an already existing pool of enumerators to compose the mobile teams assigned to each region. In the case of Malawi, the statistics office managed to assign at least two females to each mobile team, however it was difficult to hire enough women, so the female team supervisors were asked to conduct individual interviews, as well. In Cambodia, although the LSMS+ survey was associated with the national socioeconomic survey, the enumerators were hired and trained separately for the LSMS+ portion of the survey operation so the LSMS+ program could require that the survey staff hired were split evenly between male and female enumerators.



#### 4.4.

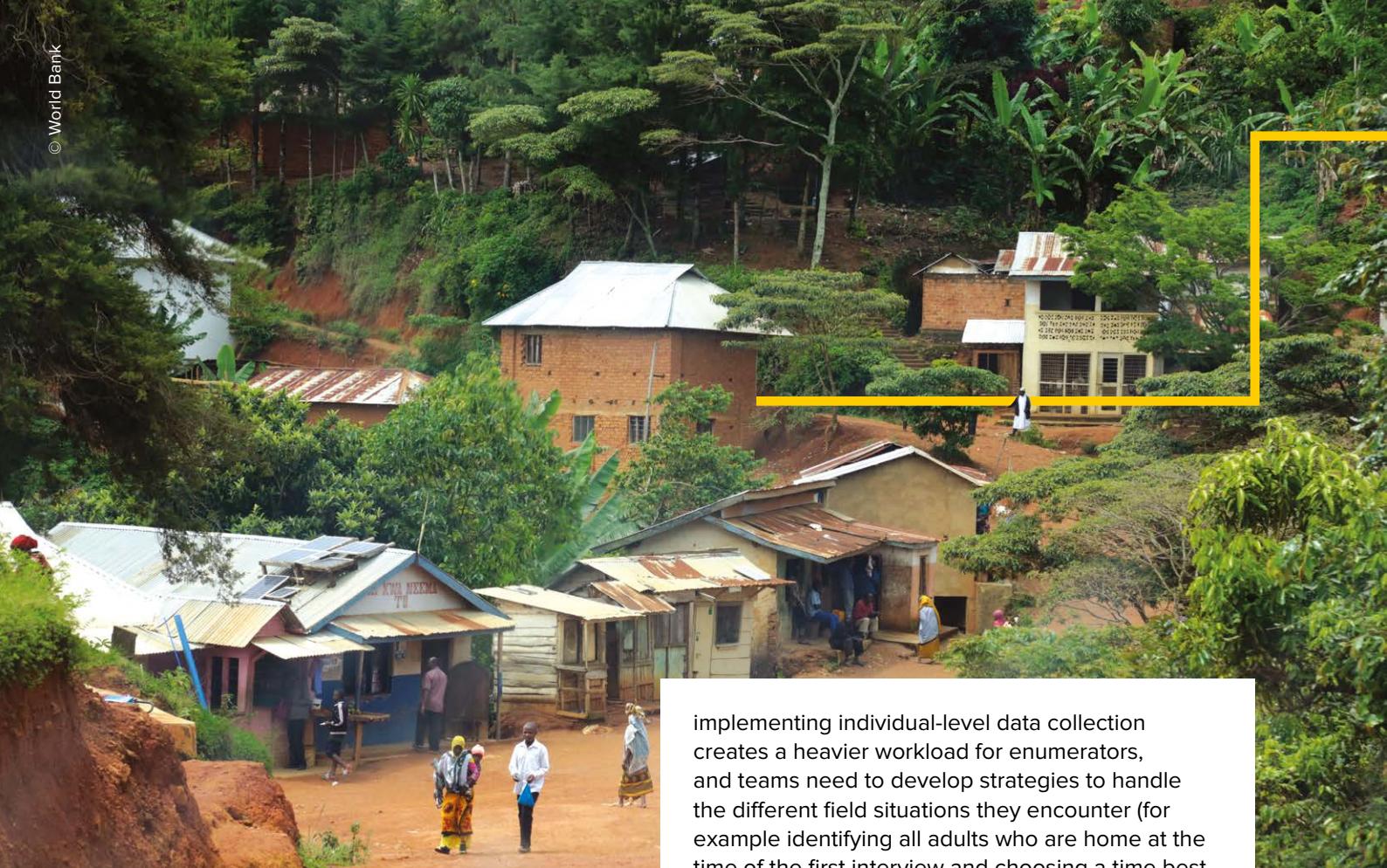
## Training and Fieldwork Organization

To conduct private interviews with adult household members, more careful planning and organization is required than in a typical fieldwork set-up. Proper time must be allotted prior to field staff training to determine the appropriate field team composition, taking into consideration the regional/linguistic background of enumerators, the gender composition of the teams, and the number of team members required to allow for multiple and possibly simultaneous interviews.

During field staff training, it should be stressed that enumerators should not share information from these confidential interviews amongst themselves or with other adults in the household. On asset ownership specifically, focusing on the technical definitions for each asset ownership and rights construct and discussing the differences among them is critical. **It is imperative to highlight that responses to ownership and rights questions should not necessarily be consistent across all different constructs.** A respondent may have the right to make improvements on a parcel of land, but not the right to sell the parcel.

**In training it is imperative to highlight that responses to ownership and rights questions should not necessarily be consistent across all different constructs**

Upon arrival in an enumeration area, field teams should attempt to identify all households assigned on their first day. Teams should compile a preliminary list of the number of eligible adults in each household and the gender composition. This is, of course, the preliminary list and the final determination of target individuals in each household will be based on the household roster developed by the enumerators while conducting interviews.



The approach to communities and households on presenting the need for individual interviews is critical. Survey managers should provide a Statement of Purpose to survey teams and guidance regarding who to approach in communities. Similar to other household survey introductions the Statement should highlight the importance of confidentiality and why collecting this information is important, but it should also emphasize that multiple individuals in the household will need to be interviewed so that respondents know what to expect and the purpose of the individual questionnaire so that the household members all understand why interviews must be conducted while respondents are alone. Enumerators should present questions in such a way that the respondents feel comfortable sharing any hidden assets and feel comfortable responding honestly to questions on ownership and rights.

Strong communication between survey team members is essential when attempting to conduct individual interviews. Individual interviews should not all be saved for the last day in an enumeration area but should be conducted throughout the time spent in a location depending on the availability of respondents. As noted by the Malawi NSO,

implementing individual-level data collection creates a heavier workload for enumerators, and teams need to develop strategies to handle the different field situations they encounter (for example identifying all adults who are home at the time of the first interview and choosing a time best for them, and scheduling interviews ahead of time for those who may be at work or away from the household at the time of the first interview). Also, in Malawi, the field teams reported that it was easier to schedule and conduct private interviews in rural areas, while in urban areas they needed to be more flexible to conduct interviews during the evenings and weekends. Since they were also attempting to conduct interviews simultaneously and with a gender match-up between the enumerators and the respondents, they had to make decisions on when to proceed with one interview at a time versus wait for the opportunity for either other respondents or other enumerators to become available. This was usually determined by how sure they could be that a future booking would be kept by the household members.

Finally, prior to any new enumerators approaching a household member for an individual interview (either in pursuit of conducting simultaneous interviews or achieving a gender match between the respondent and the enumerator), the enumerator that conducted the household interview should provide a short overview of the household composition and any pertinent information on the household so that each enumerator has an understanding of the household composition prior to starting their interview with a new individual.

## 4.5.

# Data Entry and Quality Control

### 4.5.1.

#### Computer Assisted Personal Interviewing

To ensure quality and timely availability of data, using the World Bank's Survey Solutions CAPI software or another CAPI software with similar features is recommended. Survey practitioners electing to use *Survey Solutions*<sup>25</sup> can access already developed modules on assets and employment on Designer, the *Survey Solutions* web application for creating questionnaires.<sup>26</sup> The use of *Survey Solutions* allows for the real-time availability of data as completed interviews are synced to the system as soon as the field teams can access internet, questionnaires are then approved by the Supervisor, and sent to Headquarters for the survey management team to review individual questionnaires on the server or export to Stata or SAS to run batch checks.

The *Survey Solutions* CAPI-based data entry application used in each country should be designed to stream-line the data collection process. Prior programming of the data entry application allows for a wide variety of range and consistency checks

<sup>25</sup> All LSMS country programs use *Survey Solutions*. It is used in 175 countries and full information on survey programs using *Survey Solutions* can be found [here](#).

<sup>26</sup> <https://designer.mysurvey.solutions/>.

to be conducted and reported and potential issues investigated and corrected before a survey team finalizes work in an assigned enumeration area (EA). The checks should be programmed based on recent survey data available in the country.

*Survey Solutions* provides two options for creating enumerator assignments: sample mode and census mode. The household-level interviews in each LSMS+ country were collected in "sample" mode (assignments for a specific household generated from headquarters with pre-filled information available) as opposed to "census" mode (new interviews created by interviewers from a template with no information pre-filled). In Malawi, Tanzania, and Ethiopia this was done to carry forward the information collected in the previous waves of the panel survey for each country. Household location information, the household roster, and the agricultural parcel rosters were pre-filled prior to each interview conducted. In Cambodia since it was part of a stand-alone cross-sectional operation, "sample" mode was used solely for the statistics office to have more control over the sample by pre-filling location information for the selected households.





**One of the most critical components of this type of data collection is ensuring that each adult interviewed is referring to the same information.** Whether they are identifying an owner or rights holder from the household roster or answering a series of questions regarding a particular asset, it is essential that they refer to the same rosters in each interview.

To achieve this objective, the administration of the individual-level interviews in *Survey Solutions* varied by country. In Malawi, the strategy followed the approach used in Uganda in MEXA with a separate census mode questionnaire generated for each individual interview in a particular household. After the enumerator assigned to a panel household completed the main portion of the interview (Household and Agriculture Modules), they manually copied the key information from the interview into a paper questionnaire “Booklet of Rosters” composed of Household, Parcel, and Plot rosters that needed to be the same in each of the individual interviews conducted. Prior to approaching the household for the individual interview, enumerators tasked with conducting an interview at the household met away from the household and entered the entire Household, Garden and Plot rosters into the new census mode individual questionnaire they created on their tablet.

In Tanzania, Ethiopia, and Cambodia, to avoid manually copying information between the household and individual questionnaires on the tablet, instead the individual questionnaire modules were incorporated into the household questionnaire and the *Survey Solutions* questionnaire was programmed to generate individual modules for each adult tagged for an interview and the relevant roster for each module was fed forward. This eliminated any errors in the manual data entry by enumerators, however it limited the ability of field teams to conduct individual interviews simultaneously while achieving gender match-up between enumerators and respondents.

#### **4.5.2.** **Data Quality Control**

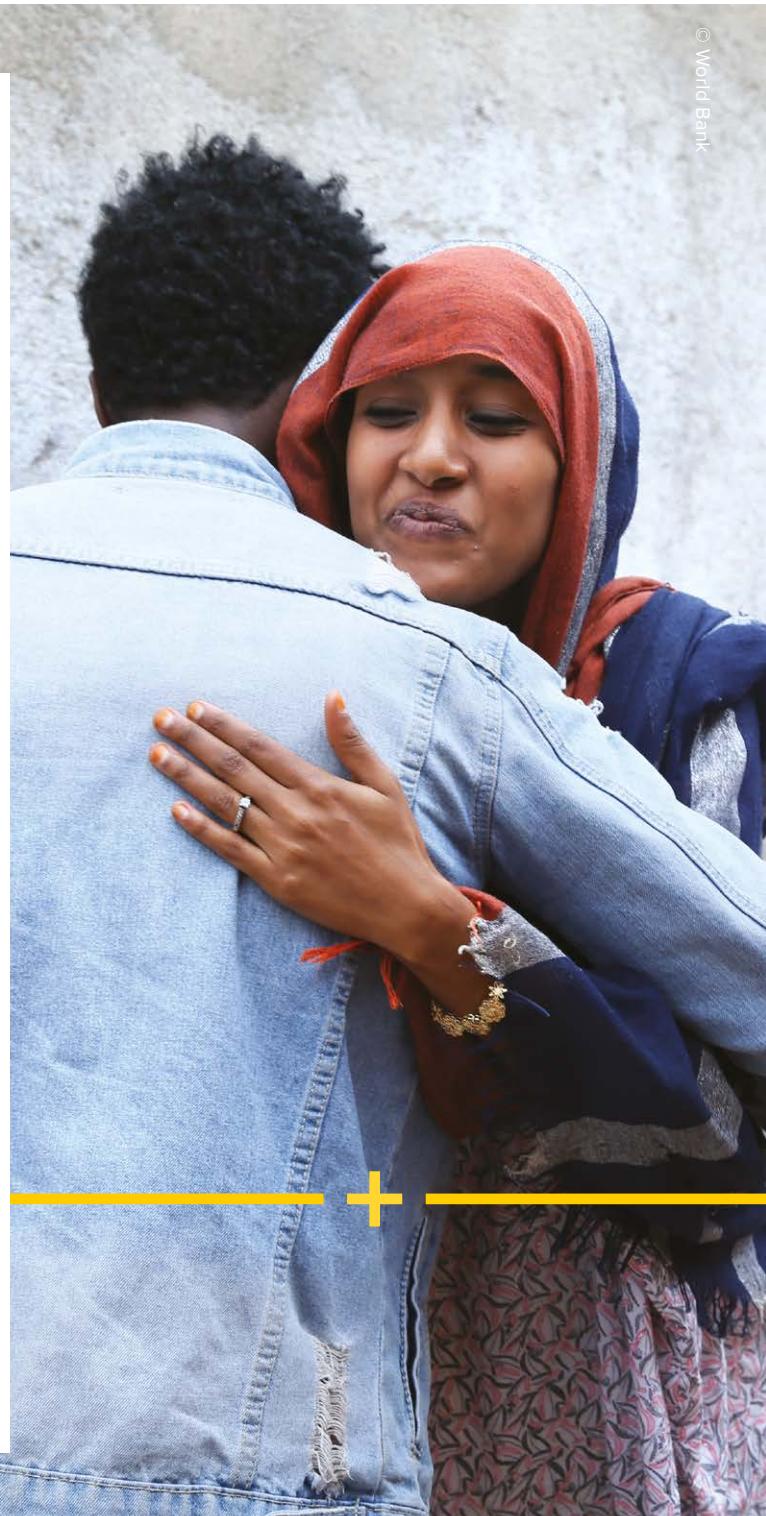
Recording the GPS coordinates<sup>27</sup> of the dwelling units in the *Survey Solutions* application allows Headquarters to see the location of the dwellings plotted on a map of each country to better enable supervision from afar – checking both the number of interviews performed and the fact that the sample households lie within EA boundaries. As survey management teams receive data from the field, it is also recommended that produce the tables found in **Annex III** on a weekly or bi-weekly basis, depending on the duration of the fieldwork, and by survey teams and individual enumerators. Tables should be generated for each module of interest to identify the incidence of self-response versus proxy respondents. Additionally, the incidence of ownership of each asset class and asset, by gender, should be generated to ensure that the estimates are in line with the expectations.

<sup>27</sup> As was done in the LSMS+ countries, this also allows the geo-referenced household locations to be linked with publicly available geospatial databases to make accessible a number of geospatial variables - extensive measures of distance (i.e. distance to the nearest market), climatology, soil and terrain, and other environmental factors.

# 5.

## Conclusions

Individual ownership and control of assets, labor, and time use, as well as decision-making roles in family enterprises are key data gaps on men's and women's economic opportunities. Individual-disaggregated data are critical in these areas for monitoring the SDGs. Policies targeted towards raising men's and women's employment outcomes and productivity also rely on an accurate picture of the economic realities they face within households. Established in 2016, the LSMS+ program provides support to survey data production and methodological research to improve the availability and quality of individual-disaggregated survey data collected in low- and middle-income countries on key dimensions of men's and women's economic opportunities and welfare. In its current phase, the LSMS+ has supported NSOs in select low-income countries on the operationalization of the latest international recommendations for individual-disaggregated survey data collection on ownership of and rights to physical and financial assets; work and employment; and non-farm enterprises. This document aims to guide survey practitioners in collecting household survey data on these priority topics, anchored in the experience with the LSMS+ supported surveys and methodological research. In the immediate term, "Strengthening gender surveys and statistics through IDA 19" will be one of the projects that will be informed by the LSMS+ recommendations and that is collaboration between World Bank Gender Group, the Poverty and Equity Global Practice (Poverty GP) and the LSMS+ program. This new project aims to narrow gender data gaps related to economic outcomes in at least 10 IDA countries through the provision of technical assistance to NSOs to align their data production systems with the latest international standards and guidance.





# Annex I

## LSMS+ sample questionnaire modules

—  
**Household level interview**

—  
**Individual level interviews**

# Household level interview

A

**Household-level land roster**

B

**Household-level apartment roster**

C

**Household-level livestock**

D

**Household-level consumer durables**

## A Household-level parcel roster

|  |   |   |   |   |   |  |   |   |  |    |    |
|--|---|---|---|---|---|--|---|---|--|----|----|
| <b>1</b>   | Do you or does any member of this household use, own, or hold use rights for any parcel of land, either alone or jointly with someone else, irrespective of whether the parcel is used by you or another household, and irrespective of the use of the parcel (including dwelling, agricultural, pastoral, forest and business/commercial parcels)? |   |   |   |   |  |   |   | YES.....(1)<br>NO .....(2) >> NEXT MODULE  |    |    |
| <b>2</b>   | <b>3</b>  | <b>3a</b>   | <b>4</b>  | <b>5</b>  | <b>6</b>  | <b>7</b>   | <b>8</b>  | <b>9</b>  | <b>10</b>  |    |    |
| PARCEL NAME<br>(uniquely identifies piece of land) | Is this PARCEL the piece of land on which the dwelling is located?  | Are there any structures, buildings or houses on this PARCEL? | Under which tenure system is this PARCEL?   | How was this PARCEL acquired?   | What is the primary current use of this PARCEL?   | Is there a secondary current use of this PARCEL? | What is the secondary current use of this PARCEL?   | In the last 12 months, has this PARCEL been used for farming? | What is the area of PARCEL?  |    |    |
|  | YES .....(1)<br>NO .....(2)   | YES.....(1)<br>NO .....(2)                                    | PRIVATE.....(1)<br>STATE PUBLIC.....(2)<br>STATE PRIVATE.....(3)<br>COMMON PROPERTY (4)<br>INDIGENOUS.....(5)<br>OTHER (SPECIFY)....(6) | GIVEN BY THE GOVERNMENT OR LOCAL AUTHORITY ...(1)<br>BY INHERITANCE/GIFT FROM RELATIVES ....(2)<br>BOUGHT IT FROM A RELATIVE.....(3)<br>BOUGHT IT FROM A NON-RELATIVE.....(4)<br>CLEARED LAND/ OCCUPIED FOR FREE.....(5)<br>DONATED BY FRIEND .....(6)<br>RENTED IN.....(7)<br>OTHER (SPECIFY)....(8) | RESIDENTIAL .....(1)<br>AGRICULTURAL (FARMING AND PLANTATION).....(2)<br>AQUACULTURE .....(3)<br>PASTORAL.....(4)<br>FOREST .....(5)<br>BUSINESS/ COMMERCIAL.....(6)<br>DON'T KNOW .....(7)<br>OTHER (SPECIFY)....(8) | YES.....(1)<br>NO .....(2>9)                     | RESIDENTIAL .....(1)<br>AGRICULTURAL (FARMING AND PLANTATION).....(2)<br>AQUACULTURE .....(3)<br>PASTORAL.....(4)<br>FOREST .....(5)<br>BUSINESS/ COMMERCIAL.....(6)<br>DON'T KNOW .....(7)<br>OTHER (SPECIFY)....(8) |   | CODES FOR UNIT:<br>SQUARE METERS .....(1)<br>ACRE .....(2)<br>HECTARES.....(3)<br>OTHER (SPECIFY)....(4) |    |    |
|  |   |   |   |   |   |  |   |   | AREA   |    |    |
|  |   |   |   |   |   |  |   |   | UNIT   |    |    |
|  |   |   |   |   |   |  |   |   | --   | -- | -- |
| <b>1</b>   |   |   |   |   |   |  |   |   | --   | -- | -- |
| <b>2</b>   |   |   |   |   |   |  |   |   | --   | -- | -- |
| <b>3</b>   |   |   |   |   |   |  |   |   | --   | -- | -- |
| <b>4</b>   |   |   |   |   |   |  |   |   | --   | -- | -- |
| <b>5</b>   |   |   |   |   |   |  |   |   | --   | -- | -- |

## B Apartment/Condo Roster

|     |  |  |  |
|-----|--|--|--|
| 1   | <p><b>ENUMERATOR:</b> This is any real estate not associated with a parcel of land.</p> <p>Do you or does any member of this household own, either alone or jointly with someone else, any apartment units or condominiums irrespective of whether the apartment or condo is used by you or another household, and irrespective of whether the apartment is used for residential or commercial purposes?</p> |  |  |
|     | 2  | 3  | 4  |
|     | <p>Please list each apartment or condo that is owned by any member of this household.</p>  | <p>Where is this APARTMENT/CONDO located?<br/>ENUMERATOR TO HELP RESPONDENT IDENTIFY WHETHER LOCATION IS RURAL/URBAN.</p> <p>RURAL .....(1)<br/>URBAN .....(2)</p> | <p>What is this APARTMENT/CONDO used for?</p> <p>HOUSEHOLD RESIDENCE.....(1)<br/>COMMERCIAL USE (HOUSEHOLD).....(2)<br/>RENTED OUT FOR RESIDENTIAL USE (BY ANOTHER INDIVIDUAL/HOUSEHOLD).....(3)<br/>RENTED OUT FOR COMMERCIAL USE (BY ANOTHER INDIVIDUAL/HOUSEHOLD).....(4)<br/>OTHER (SPECIFY).....(96)<br/>DON'T KNOW .....(98)</p> |
| RE1 |  |  |  |
| RE2 |  |  |  |
| RE3 |  |  |  |
| RE4 |  |  |  |
| RE5 |  |  |  |
| RE6 |  |  |  |

## C Household-level livestock roster

| LIVESTOCK CODE | LIVESTOCK NAME | 1  | 2   |
|----------------|----------------|--|---|
|                |                | YES.....(1)<br>NO .....(2) >> NEXT LIVESTOCK | Thinking of all household members and [LIVESTOCK] they own, how many [LIVESTOCK] are owned IN TOTAL?<br><br>READ: CONSIDER ALL LIVESTOCK EXCLUSIVELY OR JOINTLY OWNED,<br>PRESENT AT YOUR FARM OR AWAY. |
| 1001           | Oxen           |  |   |
| 1002           | Cows           |  |   |
| 1003           | Calves         |  |   |
| 1004           | Buffaloes      |  |   |
| 1005           | Horses, Ponies |  |   |
| 1006           | Pigs           |  |   |
| 1007           | Goats          |  |   |
| 1008           | Sheep          |  |   |
| 1009           | Chickens       |  |   |
| 1010           | Ducks          |  |   |
| 1011           | Quail          |  |   |
| 1012           | Turkeys        |  |   |
| 1013           | Geese          |  |   |
| 1014           | Bull           |  |   |

## D Household level consumer durables

| ITEM CODE | ITEM NAME      | 1  | 2  |
|-----------|----------------|--|--|
|           |                | Does any member of this household own any [CONSUMER DURABLE] at present, exclusively and/or jointly with someone else? | Thinking of all household members and [CONSUMER DURABLE] they own, how many [CONSUMER DURABLE] are owned IN TOTAL? |
|           |                | YES.....(1)<br>NO .....(2) >> NEXT ITEM<br>DON'T KNOW .....(98) >> NEXT ITEM   | NUMBER   |
| 1101      | Cell phone     |  |  |
| 1102      | Computer       |  |  |
| 1103      | Bicycle        |  |  |
| 1104      | Motorcycle     |  |  |
| 1105      | Car            |  |  |
| 1106      | Tuk tuk        |  |  |
| 1107      | Boat           |  |  |
| 1108      | Tractor/Koryun |  |  |

# Individual level interviews

E

Individual-level parcel details

F

Individual-level apartment roster

G

Individual-level livestock

H

Individual-level consumer durables and valuables

I

Mobile phone ownership

J

Financial assets

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|               |  |   |  | 1   | 2   | 3  | 4  |          |          |          |                                  |                                    |
|---------------|--|---|--|---|---|--|--|----------|----------|----------|----------------------------------|------------------------------------|
| PARCEL NUMBER | CAPI: PARCEL NAME<br>[FED FORWARD FROM HH LEVEL LAND ROSTER] | CAPI: Is this [PARCEL] the piece of land on which the dwelling is located?<br>[FED FORWARD FROM HH LEVEL LAND ROSTER]   | CAPI: How was this [PARCEL] acquired?    | Do you <u>use, own or hold use rights</u> for this [PARCEL], either alone or jointly with someone else? | Do you <b>OWN</b> this [PARCEL], either alone or jointly with someone else? | Does anyone jointly <u>own</u> this [PARCEL] with you? | Who else jointly <u>owns</u> this [PARCEL] with you?<br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD. | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
|               | YES.....(1)<br>NO .....(2)                                   | GIVEN BY THE GOVERNMENT OR LOCAL AUTHORITY .....(1)<br>BY INHERITANCE OF GIFT FROM RELATIVES.....(2)<br>BOUGHT IT FROM A RELATIVE .....(3)<br>BOUGHT IT FROM A NON-RELATIVE ....(4)<br>CLEARED LAND/OCCUPIED FOR FREE... (5)<br>DONATED BY FRIEND .....(6)<br>RENTED IN.....(7)<br>OTHER(SPECIFY).....(8) | YES.....(1)<br>NO ....(2) >> NEXT PARCEL | YES.....(1)<br>NO ....(2) >> 5  | YES.....(1)<br>NO ....(2) >> 5  |  |  |          |          |          |                                  |                                    |
| 1             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 2             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 3             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 4             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 5             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 6             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 7             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |
| 8             |  |   |  |   |   |  |  |          |          |          |                                  |                                    |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|                      | <b>5</b>   | <b>6</b>   | <b>7</b>  | <b>8</b>   | <b>9</b>   |                 |   | <b>10</b>   |  |
|----------------------|--|--|---|--|--|-----------------|---|---|--|
|                      | Does your household have a document for this [PARCEL], such as an application receipt, land investigation paper, certificate (title) from the government, paper from local authority, lease or rental contract ? | What type of documents is there for this [PARCEL]?   | Is your name among the names listed on the documents for the [PARCEL] as owner or right use holder? | Does anyone else's names are on the ownership document for this [PARCEL] as owners or right use holders? | Who else's names are on the ownership document for this [PARCEL] as owners or right use holders?<br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD. |                 |   | ENUMERATOR: WAS THE RESPONDENT ABLE TO PRODUCE THE DOCUMENTATION FOR CONFIRMATION PURPOSES?   |  |
|                      | YES.....(1)<br>NO .....(2) >> 11   | <b>DOCUMENT TYPE:</b><br>1 = APPLICATION RECEIPT<br>2 = LAND INVESTIGATION PAPER<br>3 = CERTIFICATE (TITLE) FROM THE GOVERNMENT<br>4 = PAPER FROM LOCAL AUTHORITY<br>5 = RENTAL CONTRACT<br>6 = OTHER (SPECIFY)<br>7 = DON'T KNOW / NOT SURE | YES.....(1)<br>NO .....(2) >> 11  | YES.....(1)<br>NO .....(2) >> 11   |  |                 |   | YES .....(1)<br>NO, REFUSED .....(2)<br>NO, CANNOT BE LOCATED. ....(3)<br>NO, HAVE NO ACCESS ....(4)<br>NO, OTHER (SPECIFY) ....(6) |  |
| <b>PARCEL NUMBER</b> | <b>Document Type 1</b>   | <b>Document Type 1</b>   |   | <b>HH ID #1</b>  | <b>HH ID #2</b>  | <b>HH ID #3</b> | <b># OF 18+ OLD MALE NON-HH MEMBERS</b> | <b># OF 18+ OLD FEMALE NON-HH MEMBERS</b>   |  |
| <b>1</b>             |  |  |   |  |  |                 |   |   |  |
| <b>2</b>             |  |  |   |  |  |                 |   |   |  |
| <b>3</b>             |  |  |   |  |  |                 |   |   |  |
| <b>4</b>             |  |  |   |  |  |                 |   |   |  |
| <b>5</b>             |  |  |   |  |  |                 |   |   |  |
| <b>6</b>             |  |  |   |  |  |                 |   |   |  |
| <b>7</b>             |  |  |   |  |  |                 |   |   |  |
| <b>8</b>             |  |  |   |  |  |                 |   |   |  |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|                         | SKIP TO QUESTION 26 IF QUESTION Q2!=1 AND Q5!=1  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
|-------------------------|--|-------------|------------|----------|----------------------------------|------------------------------------|-------------------------|---------------------|------------------------------|------------|----------|----------|----------------------------------|------------------------------------|-------------------------|-------------|-------------------------|----------|----------|----------|----------------------------------|------------------------------------|
|                         | <b>11</b>  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
|                         | <p>With regard to this [PARCEL], are you among the individuals who have the <b>right to sell</b> it, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to sell</b> it, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [PARCEL], who else has the <b>right to sell</b> it, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| PARCEL ID               | RESPONDENT   |             |            |          |                                  |                                    | HH ROSTER MEMBER #1     |                     |                              |            |          |          | HH ROSTER MEMBER #2              |                                    |                         |             |                         |          |          |          |                                  |                                    |
|                         | Do you have right?   | Permission? | From whom? |          |                                  |                                    | Anyone else?            | Who else has right? | Permission?                  | From whom? |          |          |                                  | Anyone else?                       | Who else has right?     | Permission? | From whom?              |          |          |          |                                  |                                    |
| YES..(1)<br>NO..(2)>>12 | YES..(1)<br>NO..(2)<br>>> HH ID#1  | HH ID #1    | HH ID #2   | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>12 | HH ID#1             | YES..(1)<br>NO..(2)>>HH ID#2 | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>12 | HH ID #2    | YES..(1)<br>NO..(2)>>12 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
| <b>1</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>2</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>3</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>4</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>5</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>6</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>7</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |
| <b>8</b>                |  |             |            |          |                                  |                                    |                         |                     |                              |            |          |          |                                  |                                    |                         |             |                         |          |          |          |                                  |                                    |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|                         | 12   |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
|-------------------------|--|------------|----------|----------|----------------------------------|------------------------------------|-------------------------|------------|------------------------------|----------|--------------|---------------------|----------------------------------|------------------------------------|-------------------------|----------|-------------------------|----------|----------|----------|----------------------------------|------------------------------------|--|--|
| PARCEL ID               | <p>With regard to this [PARCEL], are you among the individuals who have the <b>right to bequeath</b> it, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to bequeath</b> it, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [PARCEL], who else has the <b>right to bequeath</b> it, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
|                         | RESPONDENT   |            |          |          |                                  |                                    | HH ROSTER MEMBER #1     |            |                              |          |              |                     | HH ROSTER MEMBER #2              |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| Do you have right?      | Permission?  | From whom? |          |          | Anyone else?                     | Who else has right?                | Permission?             | From whom? |                              |          | Anyone else? | Who else has right? | Permission?                      | From whom?                         |                         |          |                         |          |          |          |                                  |                                    |  |  |
| YES..(1)<br>NO..(2)>>13 | YES..(1)<br>NO..(2)>>HH ID#1   | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>13 | HH ID#1    | YES..(1)<br>NO..(2)>>HH ID#2 | HH ID #1 | HH ID #2     | HH ID #3            | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>13 | HH ID #2 | YES..(1)<br>NO..(2)>>14 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |  |  |
| 1                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 2                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 3                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 4                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 5                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 6                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 7                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 8                       |  |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |

## E Individual-level parcel details

5/9

Will be administered to each adult household member aged 18 and above

|                         | 13   |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
|-------------------------|--|-------------|------------|----------|----------------------------------|------------------------------------|-------------------------|-------------|------------------------------|----------|----------|--------------|----------------------------------|------------------------------------|-------------------------|----------|-------------------------|----------|----------|----------|----------------------------------|------------------------------------|--|--|
|                         | <p>With regard to this [PARCEL], are you among the individuals who have the <b>right to use</b> it as collateral, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to use</b> it as collateral, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [PARCEL], who else has the <b>right to use</b> it a collateral, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| PARCEL ID               | RESPONDENT   |             |            |          |                                  |                                    | HH ROSTER MEMBER #1     |             |                              |          |          |              | HH ROSTER MEMBER #2              |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
|                         | Do you have right?   | Permission? | From whom? |          |                                  | Anyone else?                       | Who else has right?     | Permission? | From whom?                   |          |          | Anyone else? | Who else has right?              | Permission?                        | From whom?              |          |                         |          |          |          |                                  |                                    |  |  |
| YES..(1)<br>NO..(2)>>14 | YES..(1)<br>NO..(2)>>HH ID#1   | HH ID #1    | HH ID #2   | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>14 | HH ID#1     | YES..(1)<br>NO..(2)>>HH ID#2 | HH ID #1 | HH ID #2 | HH ID #3     | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>14 | HH ID #2 | YES..(1)<br>NO..(2)>>14 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |  |  |
| 1                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 2                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 3                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 4                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 5                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 6                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 7                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |
| 8                       |  |             |            |          |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |  |  |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|           | <b>14</b>  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
|-----------|--|------------------------------|------------|----------|----------|----------------------------------|------------------------------------|-------------------------|------------|------------------------------|----------|--------------|---------------------|----------------------------------|------------------------------------|-------------------------|----------|-------------------------|----------|----------|----------|----------------------------------|------------------------------------|
|           | <p>With regard to this [PARCEL], are you among the individuals who have the <b>right to rent it out</b>, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to rent it out</b>, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [PARCEL], who else has the <b>right to rent it out</b>, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| PARCEL ID | RESPONDENT   |                              |            |          |          |                                  | HH ROSTER MEMBER #1                |                         |            |                              |          |              | HH ROSTER MEMBER #2 |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
|           | Do you have right?   | Permission?                  | From whom? |          |          | Anyone else?                     | Who else has right?                | Permission?             | From whom? |                              |          | Anyone else? | Who else has right? | Permission?                      | From whom?                         |                         |          |                         |          |          |          |                                  |                                    |
| 1         | YES..(1)<br>NO..(2)>>15  | YES..(1)<br>NO..(2)>>HH ID#1 | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>15 | HH ID#1    | YES..(1)<br>NO..(2)>>HH ID#2 | HH ID #1 | HH ID #2     | HH ID #3            | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>15 | HH ID #2 | YES..(1)<br>NO..(2)>>15 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
| 2         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| 3         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| 4         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| 5         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| 6         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| 7         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| 8         |  |                              |            |          |          |                                  |                                    |                         |            |                              |          |              |                     |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|                         | <b>15</b>   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
|-------------------------|---|-------------|------------|--------|----------------------------------|------------------------------------|-------------------------|-------------|------------------------------|----------|----------|--------------|----------------------------------|------------------------------------|-------------------------|----------|-------------------------|----------|----------|----------|----------------------------------|------------------------------------|
|                         | <p>With regard to this [PARCEL], are you among the individuals who have the <b>right to make improvements/invest in it</b>, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to make improvements/invest in it</b>, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [PARCEL], who else has the <b>right to make improvements/invest in it</b>, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| PARCEL ID               | RESPONDENT  |             |            |        |                                  |                                    | HH ROSTER MEMBER #1     |             |                              |          |          |              | HH ROSTER MEMBER #2              |                                    |                         |          |                         |          |          |          |                                  |                                    |
|                         | Do you have right?  | Permission? | From whom? |        |                                  | Anyone else?                       | Who else has right?     | Permission? | From whom?                   |          |          | Anyone else? | Who else has right?              | Permission?                        | From whom?              |          |                         |          |          |          |                                  |                                    |
| YES..(1)<br>NO..(2)>>16 | YES..(1)<br>NO..(2)>>DOES ANYONE ELSE   | HH ID #1    | HH D#2     | HH D#3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>16 | HH ID#1     | YES..(1)<br>NO..(2)>>HH ID#2 | HH ID #1 | HH ID #2 | HH ID #3     | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES..(1)<br>NO..(2)>>16 | HH ID #2 | YES..(1)<br>NO..(2)>>15 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
| <b>1</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>2</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>3</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>4</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>5</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>6</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>7</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |
| <b>8</b>                |   |             |            |        |                                  |                                    |                         |             |                              |          |          |              |                                  |                                    |                         |          |                         |          |          |          |                                  |                                    |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|           | <b>16</b>                             | <b>17</b>  | <b>18</b>  | <b>19</b>   |          |          |                                  | <b>20</b>   | <b>21</b>   |
|-----------|---------------------------------------|--|--|---|----------|----------|----------------------------------|---|---|
| PARCEL ID | CAPI: IS THIS AN AGRICULTURAL PARCEL? | Are you among the decision-maker(s) for any of the plots located on this [PARCEL] regarding the timing of crop activities, crop choice, and input use? | Is anyone else among the decisionmaker(s) for any of the plots located on this [PARCEL] regarding the timing of crop activities, crop choice, and input use? | Who is (or who else is) the decision-maker(s) for any of the plots located on this [PARCEL] regarding the timing of crop activities, crop choice, and input use?<br><br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WHO ARE DECISIONMAKER(S) AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD. |          |          |                                  | Do land owners sell/rent out land in or around the ward where the parcel is located?  | Are you informed regarding recent land sales and/or rental transactions in or around the ward where the parcel is located?  |
|           | YES.....(1)<br>NO ....(2) >> 20       | YES.....(1)<br>NO ....(2) >> 20  | YES.....(1)<br>NO ....(2) >> 20  |   |          |          |                                  | LAND OWNERS ONLY SELL.....(1)<br>LAND OWNERS ONLY RENT OUT.....(2)<br>LAND OWNERS SELL AND RENT ....(3)<br>NO LAND TRANSACTIONS .....(4) >>22<br>DO NOT KNOW .....(98) >>22 | ONLY INFORMED OF SALES TRANSACTIONS.....(1)<br>ONLY INFORMED OF RENTAL TRANSACTIONS .....(2)<br>INFORMED OF BOTH SALES AND RENTAL TRANSACTIONS ....(3)<br>NOT INFORMED OF SALES OR RENTAL TRANSACTIONS .....(4) |
| 1         |                                       |  |  | HH ID #1  | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS  |   |
| 2         |                                       |  |  |   |          |          |                                  |   |   |
| 3         |                                       |  |  |   |          |          |                                  |   |   |
| 4         |                                       |  |  |   |          |          |                                  |   |   |
| 5         |                                       |  |  |   |          |          |                                  |   |   |
| 6         |                                       |  |  |   |          |          |                                  |   |   |
| 7         |                                       |  |  |   |          |          |                                  |   |   |
| 8         |                                       |  |  |   |          |          |                                  |   |   |

## E Individual-level parcel details

Will be administered to each adult household member aged 18 and above

|           | <b>22</b>   | <b>23</b>                        | <b>24</b>   | <b>25</b>   |          |          |          | <b>26</b>  | <b>27</b>  |
|-----------|---|----------------------------------|---|---|----------|----------|----------|--|--|
| PARCEL ID | If this [PARCEL] were to be sold today, how much could be received for it?<br><br>VALUE SHOULD BE INCLUSIVE OF ANY BUILDINGS/STRUCTURES ON THE PARCEL<br><br>RECORD 97 IF REFUSE TO ANSWER. RECORD 98 IF DO NOT KNOW. |                                  | If this [PARCEL] were to be sold today, would you be among the individuals to decide how the money is used? | If this [PARCEL] were to be sold today, who (or who else) would decide how the money is used?<br><br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WHO WOULD DECIDE AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD WHO WOULD DECIDE. |          |          |          | How likely are you to <b>involuntarily</b> lose ownership or use rights to this [PARCEL] in the next 5 years?  | Who was present along with the respondent during the individual interview?<br><br>SEE CODE BELOW<br><br>(Reasons interview not administered with the respondent(s) alone should be explained in the remarks)                                       |
|           | YES.....(1)<br>NO .....(2) >> 26  | YES.....(1)<br>NO .....(2) >> 26 |   |   |          |          |          | NOT AT ALL LIKELY .....(1)<br>SLIGHTLY LIKELY .....(2)<br>YES, MODERATELY LIKELY .....(3)<br>YES, VERY LIKELY.....(4)<br>YES, EXTREMELY LIKELY.....(5) | RESPONSE CODES:<br><br>ALONE .....(1)<br>WITH ADULT FEMALES PRESENT.....(2)<br>WITH ADULT MALES PRESENT .....(3)<br>WITH ADULTS MIXED SEX PRESENT .....(4)<br>WITH CHILDREN PRESENT .....(5)<br>WITH ADULTS MIXED SEX AND CHILDREN PRESENT.....(6) |
|           | AMOUNT  | UNIT                             |   |   | HH PID A | HH PID B | HH PID C | # OF 18+ OLD MALE NON-HH MEMBERS   | # OF 18+ OLD FEMALE NON-HH MEMBERS   |
|           | 1   |                                  |   |   |          |          |          |  |  |
|           | 2   |                                  |   |   |          |          |          |  |  |
|           | 3   |                                  |   |   |          |          |          |  |  |
|           | 4   |                                  |   |   |          |          |          |  |  |
|           | 5   |                                  |   |   |          |          |          |  |  |
|           | 6   |                                  |   |   |          |          |          |  |  |
| 7         |   |                                  |   |   |          |          |          |  |  |
| 8         |   |                                  |   |   |          |          |          |  |  |

## F Individual-level apartment/condo details

Will be administered to each adult household member aged 18 and above

|   |  |  |  | 1  | 2  | 3   |                                 |          |          |          |
|---|--|--|--|--|--|---|---------------------------------|----------|----------|----------|
| CARRIED FORWARD ON CAPI: Please list each APARTMENT/ CONDO that someone in your household owns. | CARRIED FORWARD ON CAPI: Where is this [APARTMENT/ CONDO] located? | CARRIED FORWARD ON CAPI: What is this [APARTMENT/ CONDO] used for? |  | Do you OWN this [APARTMENT/ CONDO], either alone or jointly with someone else? | Does anyone jointly own this [APARTMENT/ CONDO] with you?  | Who else jointly owns this [APARTMENT/CONDO] with you?<br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD." |                                 |          |          |          |
|   |  |  |  | RURAL .....(1)<br>URBAN .....(2)   | HOUSEHOLD RESIDENCE.....(1)<br>COMMERCIAL USE (HOUSEHOLD).....(2)<br>RENTED OUT FOR RESIDENTIAL USE (BY ANOTHER INDIVIDUAL/HOUSEHOLD).....(3)<br>RENTED OUT FOR COMMERCIAL USE (BY ANOTHER INDIVIDUAL/HOUSEHOLD).....(4)<br>OTHER (SPECIFY).....(96)<br>DON'T KNOW .....(98) | YES.....(1)<br>NO .....(2) >> NEXT LINE   | YES.....(1)<br>NO .....(2) >> 4 | HH ID #1 | HH ID #2 | HH ID #3 |
| RE1   |  |  |  |  |  |   |                                 |          |          |          |
| RE2   |  |  |  |  |  |   |                                 |          |          |          |
| RE3   |  |  |  |  |  |   |                                 |          |          |          |
| RE4   |  |  |  |  |  |   |                                 |          |          |          |
| RE5   |  |  |  |  |  |   |                                 |          |          |          |
| RE6   |  |  |  |  |  |   |                                 |          |          |          |

## F Individual-level apartment/condo details

2/9

Will be administered to each adult household member aged 18 and above

|            | <b>4</b>   | <b>5</b>   | <b>6</b>   | <b>7</b>  | <b>8</b>  |          |          |                                  | <b>9</b>   |
|------------|--|--|--|---|---|----------|----------|----------------------------------|--|
|            | Is there an ownership document for this [APARTMENT/CONDO]? | What type of documents is there for this [APARTMENT/CONDO]?  | Is your name among the names listed on the documents for the [APARTMENT/CONDO] as owner or right use holder? | Does anyone else's names are on the first ownership document for this [APARTMENT/CONDO] as owners or right use holders? | Who else's names are on the ownership document for this [APARTMENT/CONDO] as owners or right use holders?<br><br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD. |          |          |                                  | ENUMERATOR: WAS THE RESPONDENT ABLE TO PRODUCE THE DOCUMENTATION FOR CONFIRMATION PURPOSES?  |
|            | YES.....(1)<br>NO .....(2) >> 10                           | A TITLE DEED.....(1)<br>CERTIFICATE OF OCCUPANCY..(2)<br>A WILL .....(3)<br>SALES AGREEMENT .....(4)<br>OTHER (SPECIFY).....(96) | YES.....(1)<br>NO .....(2) >> 10   | YES.....(1)<br>NO .....(2) >> 10  |   |          |          |                                  | YES.....(1)<br>NO, REFUSED .....(2)<br>NO, CANNOT BE LOCATED .....(3)<br>NO, HAVE NO ACCESS .....(4)<br>NO, OTHER(SPECIFY) .....(96) |
|            | Document Type  | Document Type  |  |   | HH ID #1  | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS   |
| <b>RE1</b> |  |  |  |   |   |          |          |                                  |  |
| <b>RE2</b> |  |  |  |   |   |          |          |                                  |  |
| <b>RE3</b> |  |  |  |   |   |          |          |                                  |  |
| <b>RE4</b> |  |  |  |   |   |          |          |                                  |  |
| <b>RE5</b> |  |  |  |   |   |          |          |                                  |  |
| <b>RE6</b> |  |  |  |   |   |          |          |                                  |  |

## F Individual-level apartment/condo details

Will be administered to each adult household member aged 18 and above

|                    | <b>10</b>  |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|--------------------|--|---|------------|----------|----------|----------------------------------|------------------------------------|---------------------------------|------------|---|----------|--------------|---------------------|----------------------------------|------------------------------------|---------------------------------|----------|-------------------------------|----------|----------|----------|----------------------------------|------------------------------------|
| APARTMENT/CONDO ID | <p>With regard to this [APARTMENT/CONDO], are you among the individuals who have the <b>right to sell</b> it, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to sell</b> it, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [APARTMENT/CONDO], who else has the <b>right to sell</b> it, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | RESPONDENT   |   |            |          |          |                                  | HH ROSTER MEMBER #1                |                                 |            |   |          |              | HH ROSTER MEMBER #2 |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | Do you have right?   | Permission?                             | From whom? |          |          | Anyone else?                     | Who else has right?                | Permission?                     | From whom? |   |          | Anyone else? | Who else has right? | Permission?                      | From whom?                         |                                 |          |                               |          |          |          |                                  |                                    |
|                    | YES...(1)<br>NO ...(2)<br>>> 11  | YES....(1)<br>NO ....(2)<br>>> HH ID #1 | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 11 | HH ID #1   | YES....(1)<br>NO ....(2)<br>>> HH ID #2 | HH ID #1 | HH ID #2     | HH ID #3            | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 11 | HH ID #1 | YES...(1)<br>NO ....(2) >> 11 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
|                    | <b>1</b>   |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | <b>2</b>   |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | <b>3</b>   |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | <b>4</b>   |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | <b>5</b>   |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
|                    | <b>6</b>   |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
| <b>7</b>           |  |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |
| <b>8</b>           |  |   |            |          |          |                                  |                                    |                                 |            |   |          |              |                     |                                  |                                    |                                 |          |                               |          |          |          |                                  |                                    |

## F Individual-level apartment/condo details

4/9

Will be administered to each adult household member aged 18 and above

|                    | <b>11</b>  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|--------------------|--|--|------------|----------|----------|----------------------------------|------------------------------------|---------------------------------|------------|--|----------|--------------|---------------------|----------------------------------|------------------------------------|---------------------------------|----------|---------------------------------|----------|----------|----------|----------------------------------|------------------------------------|
| APARTMENT/CONDO ID | <p>With regard to this [APARTMENT/CONDO], are you among the individuals who have the <b>right to bequeath</b> it, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to bequeath</b> it, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [APARTMENT/CONDO], who else has the <b>right to bequeath</b> it, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | RESPONDENT   |  |            |          |          |                                  | HH ROSTER MEMBER #1                |                                 |            |  |          |              | HH ROSTER MEMBER #2 |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | Do you have right?   | Permission?                              | From whom? |          |          | Anyone else?                     | Who else has right?                | Permission?                     | From whom? |  |          | Anyone else? | Who else has right? | Permission?                      | From whom?                         |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | YES...(1)<br>NO ...(2)<br>>> 12  | YES.....(1)<br>NO ....(2)<br>>> HH ID #1 | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 12 | HH ID #1   | YES.....(1)<br>NO ....(2)<br>>> HH ID #2 | HH ID #1 | HH ID #2     | HH ID #3            | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 12 | HH ID #1 | YES...(1)<br>NO ...(2)<br>>> 12 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
|                    | 1  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | 2  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | 3  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | 4  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
|                    | 5  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
| 6                  |  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
| 7                  |  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |
| 8                  |  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                                 |          |          |          |                                  |                                    |

## **F Individual-level apartment/condo details**

5/9

Will be administered to each adult household member aged 18 and above

## F Individual-level apartment/condo details

Will be administered to each adult household member aged 18 and above

|                  | <b>13</b>  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|------------------|--|--|------------|----------|----------|----------------------------------|------------------------------------|---------------------------------|------------|--|----------|--------------|---------------------|----------------------------------|------------------------------------|---------------------------------|----------|------------------------------|----------|----------|----------|----------------------------------|------------------------------------|
| APARTMENT/CONDOS | <p>With regard to this [APARTMENT/CONDO], are you among the individuals who have the <b>right to rent it out</b>, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to rent it out</b>, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [APARTMENT/CONDO], who else has the <b>right to rent it out</b>, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|                  | RESPONDENT   |  |            |          |          |                                  | HH ROSTER MEMBER #1                |                                 |            |  |          |              | HH ROSTER MEMBER #2 |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|                  | Do you have right?   | Permission?                              | From whom? |          |          | Anyone else?                     | Who else has right?                | Permission?                     | From whom? |  |          | Anyone else? | Who else has right? | Permission?                      | From whom?                         |                                 |          |                              |          |          |          |                                  |                                    |
|                  | YES...(1)<br>NO ...(2)<br>>> 14  | YES.....(1)<br>NO ....(2)<br>>> HH ID #1 | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 14 | HH ID #1   | YES.....(1)<br>NO ....(2)<br>>> HH ID #2 | HH ID #1 | HH ID #2     | HH ID #3            | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 14 | HH ID #1 | YES...(1)<br>NO ...(2) >> 14 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |
|                  | <b>1</b>   |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|                  | <b>2</b>   |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|                  | <b>3</b>   |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|                  | <b>4</b>   |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
|                  | <b>5</b>   |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
| <b>6</b>         |  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
| <b>7</b>         |  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |
| <b>8</b>         |  |  |            |          |          |                                  |                                    |                                 |            |  |          |              |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |

## F Individual-level apartment/condo details

7/9

Will be administered to each adult household member aged 18 and above

| APARTMENT/CONDOD                | 14  |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
|---------------------------------|---|------------|----------|----------|----------------------------------|------------------------------------|---------------------------------|------------|--|----------|---------------------|---------------------|----------------------------------|------------------------------------|---------------------------------|----------|------------------------------|----------|----------|----------|----------------------------------|------------------------------------|--|--|--|
|                                 | <p>With regard to this [APARTMENT/CONDO], are you among the individuals who have the <b>right to make improvements/invest in it</b>, even if you need to obtain consent or permission from someone else? If yes, do you need permission or consent from anyone else?</p> <p>Is there anyone else who has the <b>right to make improvements/invest in it</b>, even if they needed to obtain consent or permission from someone else?</p> <p>With regard to this [APARTMENT/CONDO], who else has the <b>right to make improvements/invest in it</b>, even if they needed to obtain consent or permission from someone else? Does the person need permission or consent? From whom does the person need permission or consent?</p> <p>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WITH THIS RIGHT AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD.</p> |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
|                                 | RESPONDENT  |            |          |          |                                  | HH ROSTER MEMBER #1                |                                 |            |  |          | HH ROSTER MEMBER #2 |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| Do you have right?              | Permission?   | From whom? |          |          | Anyone else?                     | Who else has right?                | Permission?                     | From whom? |  |          | Anyone else?        | Who else has right? | Permission?                      | From whom?                         |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| YES...(1)<br>NO ...(2)<br>>> 15 | YES.....(1)<br>NO ....(2)<br>>> HH ID #1  | HH ID #1   | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 15 | HH ID #1   | YES.....(1)<br>NO ....(2)<br>>> HH ID #2 | HH ID #1 | HH ID #2            | HH ID #3            | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS | YES...(1)<br>NO ...(2)<br>>> 15 | HH ID #1 | YES...(1)<br>NO ...(2) >> 15 | HH ID #1 | HH ID #2 | HH ID #3 | # OF 18+ OLD MALE NON-HH MEMBERS | # OF 18+ OLD FEMALE NON-HH MEMBERS |  |  |  |
| 1                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 2                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 3                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 4                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 5                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 6                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 7                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |
| 8                               |   |            |          |          |                                  |                                    |                                 |            |  |          |                     |                     |                                  |                                    |                                 |          |                              |          |          |          |                                  |                                    |  |  |  |

## F Individual-level apartment/condo details

8/9

Will be administered to each adult household member aged 18 and above

| <b>15</b>   | <b>16</b>  | <b>17</b>  | <b>18</b>  | <b>19</b>   |
|---|--|--|--|---|
| Do individuals sell or rent out any [APARTMENT/CONDO] in or around this village?                  | Are you informed regarding the value of recent (in the last 12 months) [APARTMENT/CONDO] sales/rental transactions?  | If this [APARTMENT/CONDO] were to be sold today, how much could be received for it?<br><br>RECORD 97 IF REFUSE TO ANSWER.<br>RECORD 98 IF DO NOT KNOW. | If this [APARTMENT/CONDO] were to be sold today, would you be among the individuals to decide how the money is used? | If this [APARTMENT/ CONDO] were to be sold today, is anyone else among the individuals to decide how the money is used? |
| YES, INDIVIDUALS RENT/SELL .....(1)<br>NO TRANSACTIONS.....(2) >>17<br>DO NOT KNOW .....(98) >>17 | ONLY INFORMED OF SALES TRANSACTIONS.....(1)<br>ONLY INFORMED OF RENTAL TRANSACTIONS .....(2)<br>INFORMED OF BOTH SALES AND RENTAL TRANSACTIONS .....(3)<br>NOT INFORMED OF SALES OR RENTAL TRANSACTIONS .....(4) | YES.....(1)<br>NO .....(2) >> 21   | YES.....(1)<br>NO .....(2) >> 21   | YES.....(1)<br>NO .....(2) >> 21  |
|   |  | AMOUNT   | UNIT   |   |
| RE1   |  |  |  |   |
| RE2   |  |  |  |   |
| RE3   |  |  |  |   |
| RE4   |  |  |  |   |
| RE5   |  |  |  |   |
| RE6   |  |  |  |   |

## F Individual-level apartment/condo details

9/9

Will be administered to each adult household member aged 18 and above

|     |           |  |          |          |                                     |                                       |
|-----|-----------|--|----------|----------|-------------------------------------|---------------------------------------|
|     | <b>20</b> | If this [APARTMENT/CONDO] were to be sold today, who would decide how the money is used?<br>LIST UP TO 3 MEMBERS FROM HOUSEHOLD ROSTER. RECORD THE NUMBER OF ADULT MALES OUTSIDE OF THE HOUSEHOLD WHO WOULD DECIDE AS WELL AS THE NUMBER OF ADULT FEMALES OUTSIDE OF THE HOUSEHOLD WHO WOULD DECIDE. |          |          |                                     | <b>21</b>                             |
|     | HH PID A  | HH PID B   | HH PID C | HH PID D | # OF 18+ OLD MALE<br>NON-HH MEMBERS | # OF 18+ OLD FEMALE<br>NON-HH MEMBERS |
| RE1 |           |  |          |          |                                     |                                       |
| RE2 |           |  |          |          |                                     |                                       |
| RE3 |           |  |          |          |                                     |                                       |
| RE4 |           |  |          |          |                                     |                                       |
| RE5 |           |  |          |          |                                     |                                       |
| RE6 |           |  |          |          |                                     |                                       |

## G Individual level livestock ownership

1/2

Will be administered to each adult household member aged 18 and above

|                |                | 1<br>CARRIED FORWARD FROM<br>HOUSEHOLD ROSTER:<br>NUMBER OF [LIVESTOCK]<br>CURRENTLY OWNED BY<br>ANY MEMBER OF THIS<br>HOUSEHOLD | 2<br>Do you own, exclusively or jointly<br>with someone else, any of these<br>[LIVESTOCK]?<br><br>RECORD AN ANSWER FOR EACH<br>TYPE OF LIVESTOCK BEFORE GOING<br>THROUGH THE ENTIRE MODULE. THEN<br>PROCEED WITH EACH APPLICABLE<br>ROW, ONE ROW AT A TIME.<br><br>ENABLED IF QUESTION 1 IS GREATER<br>THAN ZERO AND NOT MISSING. | 3<br>Are any of these<br>[LIVESTOCK] owned<br>exclusively by you, without<br>any joint owners? | 4<br>How many [LIVESTOCK] do<br>you own <b>exclusively</b> ?<br><br><b>VALIDATION:</b> HAS TO BE<br>LESS THAN OR EQUAL TO<br>THE NUMBER REPORTED IN<br>COLUMN 1. | 5<br>If you were to sell today<br>these [LIVESTOCK] that<br>you exclusively own, how<br>much would you receive?<br><br>ESTIMATE VALUES IN<br>COUNTRY CURRENCY.<br>RECORD 97 IF REFUSE TO<br>ANSWER. RECORD 98 IF DO<br>NOT KNOW. | 6<br>REPEAT AGAIN THE<br>NUMBER REPORTED IN<br>COLUMN 1.<br><br>Are any of these<br>[LIVESTOCK] owned jointly<br>by you and someone else?<br><br><b>READ:</b> JOINT OWNERS<br>CAN INCLUDE HOUSEHOLD<br>OR NON-HOUSEHOLD<br>MEMBERS. |
|----------------|----------------|--|---|--|--|--|---|
| LIVESTOCK CODE | LIVESTOCK NAME | NUMBER   | YES.....(1)<br>NO.....(2) >> NEXT ITEM  | YES.....(1)<br>NO .....(2) >> 7  | NUMBER   | VALUE  | YES.....(1)<br>NO .....(2) >> NEXT ITEM   |
| 1901           | Oxen           |  |   |  |  |  |   |
| 1902           | Cows           |  |   |  |  |  |   |
| 1903           | Calves         |  |   |  |  |  |   |
| 1904           | Buffaloes      |  |   |  |  |  |   |
| 1905           | Horses, Ponies |  |   |  |  |  |   |
| 1906           | Pigs           |  |   |  |  |  |   |
| 1907           | Goats          |  |   |  |  |  |   |
| 1908           | Sheep          |  |   |  |  |  |   |
| 1909           | Chickens       |  |   |  |  |  |   |
| 1910           | Ducks          |  |   |  |  |  |   |
| 1911           | Quail          |  |   |  |  |  |   |
| 1912           | Turkeys        |  |   |  |  |  |   |
| 1913           | Geese          |  |   |  |  |  |   |
| 1914           | Bull           |  |   |  |  |  |   |

## G Individual level livestock ownership

2/2

Will be administered to each adult household member aged 18 and above

| LIVESTOCK CODE | LIVESTOCK NAME | NUMBER | 7        |          |          | 8                                   |                                       | 9 | 10    |   |
|----------------|----------------|--------|----------|----------|----------|-------------------------------------|---------------------------------------|---|-------|---|
|                |                |        | HH PID A | HH PID B | HH PID C | # OF 18+ OLD MALE<br>NON-HH MEMBERS | # OF 18+ OLD FEMALE<br>NON-HH MEMBERS |   | VALUE | Who was present along with the respondent during the individual's interview?<br><i>(Reasons interview not administered with the respondent(s) alone should be explained in the remarks)</i> |
| 1901           | Oxen           |        |          |          |          |                                     |                                       |   |       |   |
| 1902           | Cows           |        |          |          |          |                                     |                                       |   |       |   |
| 1903           | Calves         |        |          |          |          |                                     |                                       |   |       |   |
| 1904           | Buffaloes      |        |          |          |          |                                     |                                       |   |       |   |
| 1905           | Horses, Ponies |        |          |          |          |                                     |                                       |   |       |   |
| 1906           | Pigs           |        |          |          |          |                                     |                                       |   |       |   |
| 1907           | Goats          |        |          |          |          |                                     |                                       |   |       |   |
| 1908           | Sheep          |        |          |          |          |                                     |                                       |   |       |   |
| 1909           | Chickens       |        |          |          |          |                                     |                                       |   |       |   |
| 1910           | Ducks          |        |          |          |          |                                     |                                       |   |       |   |
| 1911           | Quail          |        |          |          |          |                                     |                                       |   |       |   |
| 1912           | Turkeys        |        |          |          |          |                                     |                                       |   |       |   |
| 1913           | Geese          |        |          |          |          |                                     |                                       |   |       |   |
| 1914           | Bull           |        |          |          |          |                                     |                                       |   |       |   |

## H Individual level consumer durables

Will be administered to each adult household member aged 18 and above

|           |                | 1      | 2      | 3        | 4 |
|-----------|----------------|--------|--------|----------|---|
| ITEM CODE | ITEM NAME      | NUMBER | NUMBER | CURRENCY |   |
| 2001      | Computer       |        |        |          |   |
| 2002      | Bicycle        |        |        |          |   |
| 2003      | Motorcycle     |        |        |          |   |
| 2004      | Car            |        |        |          |   |
| 2005      | Tuk tuk        |        |        |          |   |
| 2006      | Boat           |        |        |          |   |
| 2007      | Tractor/Koryun |        |        |          |   |

## Mobile phone ownership

Will be administered to each adult household member aged 18 and above

| 1  | 2   | 3  | 4   |         |         | 5   | 6   | 7   | 8  | 9  |
|--|---|--|---|---------|---------|---|---|---|--|--|
| Do you own any mobile phones, exclusively or jointly with someone else?<br><br>INSTRUCTION: THIS REFERS TO MOBILE PHONES IN WORKING CONDITION. ABLE TO BE CHARGED TO INITIATE AT LEAST ONE CALL. | How many mobile phones do you own, exclusively or jointly, with someone else? | Does anyone else jointly own this mobile phone with you? | Who else jointly owns this [MOBILE PHONE] with you? LIST UP TO 3 FROM THE HOUSEHOLD/2 AND THE NUMBER OF ADULT (18+ YEARS OLD) NON HOUSEHOLD MEMBER" |         |         | Does this [MOBILE PHONE] have a SIM card? | Do you currently have enough airtime to initiate a call with this [MOBILE PHONE]? | Can you access the internet on this [MOBILE PHONE]? | If you were to sell this [MOBILE PHONE] today, how much would you receive? | Who was present along with the respondent during the individual interview?<br><br>SEE CODE BELOW<br><br>(Reasons interview not administered with the respondent(s) alone should be explained in the remarks) |
| YES.....(1)<br>NO .....(2) >> NEXT MODULE<br>REFUSES TO RESPOND ....(97) >> NEXT MODULE  |   | YES....(1)<br>NO ....(2) >> 5                            |   |         |         | YES.....(1)<br>NO .....(2) >> 7           | YES....(1)<br>NO ....(2)<br>DK...(98)   | YES....(1)<br>NO ....(2)                            |  |  |
|  |   | ASSET CODE   | HH ID#1   | HH ID#2 | HH ID#3 | # OF 18+ OLD MALE NON-HH MEMBERS          | # OF 18+ OLD FEMALE NON-HH MEMBERS  |   |  |  |
|  |   | 1  |   |         |         |   |   |   | CURRENCY   |  |
|  |   | 2  |   |         |         |   |   |   |  |  |

## J Financial assets

1/3

Will be administered to each adult hh members aged 18 and above

|            |   | <b>1</b>   | <b>2</b>   |
|------------|---|--|--|
| ASSET CODE | ASSET NAME                                  |  | NUMBER   |
| <b>1</b>   | <b>CURRENT ACCOUNT</b>                      | Do you own [FINANCIAL ASSET], exclusively or jointly with someone else? READ ALL CATEGORIES<br><br>YES.....(1)<br>NO .....(2) >> NEXT ITEM<br>REFUSES TO RESPOND.....(3)>> NEXT ITEM | How many of each [FINANCIAL ASSET], do you own, exclusively or jointly, with someone else? |
| <b>2</b>   | <b>SAVINGS ACCOUNT</b>                      |  |  |
| <b>3</b>   | <b>FIXED ACCOUNT</b>                        |  |  |
| <b>4</b>   | <b>INFORMAL SAVINGS PROGRAM/CLUB (VSLA)</b> |  |  |
| <b>96</b>  | <b>OTHER (SPECIFY)</b>                      |  |  |

## J Financial assets

2/3

Will be administered to each adult hh members aged 18 and above

|          |                               | 3  | 4  | 5   |          |          | 6   | 7  |
|----------|-------------------------------|--|--|---|----------|----------|---|--|
| ASSET NO | NAME OF FINANCIAL INSTITUTION | List code of [FINANCIAL ASSET] owned by respondent   | Does anyone else jointly own [FINANCIAL ASSET] with you? | Who else jointly owns [FINANCIAL ASSET] with you?<br>LIST UP TO 3 FROM THE HOUSEHOLD/ FOR NON HOUSEHOLD MEMBER CASE WRITE THE NUMBER OF ADULT (18+ YEARS OLD) |          |          | Is your name on the account for this [FINANCIAL ASSET]? | Is there anyone else whose name is on the account for this [FINANCIAL ASSET] with you? |
| FA1      |                               | CURRENT .....(1)<br>SAVINGS .....(2)<br>FIXED.....(3)<br>INFORMAL SAVINGS PROGRAM/CLUB .....(4)<br>OTHER FINANCIAL ASSETS (SPECIFY).....(96) | YES.....(1)<br>NO ....(2) >> Q6                          | HH ID #1  | HH ID #2 | HH ID #3 | #18+ male non HH-member                                 | #18+ female non HH-member  |
| FA2      |                               |  |  |   |          |          |   |  |
| FA3      |                               |  |  |   |          |          |   |  |
| FA4      |                               |  |  |   |          |          |   |  |
| FA9      |                               |  |  |   |          |          |   |  |

## J Financial assets

3/3

Will be administered to each adult hh members aged 18 and above

|          | 8  |          |          |                         |                           | 9   | 10   | 11   | 12   |          |          | 13  |
|----------|--|----------|----------|-------------------------|---------------------------|---|--|--|--|----------|----------|---|
|          | Whose names are on the ownership documents for [FINANCIAL ASSET]? LIST UP TO 3 FROM THE HOUSEHOLD/ FOR NON HOUSEHOLD MEMBER CASE WRITE THE NUMBER OF ADULT (18+ YEARS OLD) |          |          |                         |                           | What is the current value [FINANCIAL ASSET]? RECORD 97 IF REFUSE TO ANSWER. RECORD 98 IF DO NOT KNOW. | Are there any household members above the age of 18 that do not know about your ownership of this [FINANCIAL ASSET]? | Are you the only member of your household above the age of 18 that knows about your ownership of this [FINANCIAL ASSET]? | Which household member above the age of 18 does not know about your ownership of this [FINANCIAL ASSET]? LIST UP TO THREE FROM HOUSEHOLD ROSTER. |          |          | CODE FOR ABILITY FOR RESPONDENT TO BE INTERVIEWED ALONE:<br><i>(Reasons module not administered with the respondent(s) alone should be explained in the remarks)</i>  |
| ASSET NO | HH ID #1   | HH ID #2 | HH ID #3 | #18+ male non HH-member | #18+ female non HH-member | CURRENCY  | YES....(1)<br>NO ....(2) >> NEXT ROW   | YES.... (1) >> NEXT ROW<br>NO ....(2)  |  |          |          | RESPONSE CODES:<br>ALONE .....(1)<br>WITH ADULT FEMALES PRESENT .....(2)<br>WITH ADULT MALES PRESENT .....(3)<br>WITH ADULTS MIXED SEX PRESENT .....(4)<br>WITH CHILDREN PRESENT .....(5)<br>WITH ADULTS MIXED SEX AND CHILDREN PRESENT ... (6) |
|          | FA1  |          |          |                         |                           |   |  |  | HH ID #1   | HH ID #2 | HH ID #3 |   |
|          | FA2  |          |          |                         |                           |   |  |  |  |          |          |   |
|          | FA3  |          |          |                         |                           |   |  |  |  |          |          |   |
|          | FA4  |          |          |                         |                           |   |  |  |  |          |          |   |
|          | FA9  |          |          |                         |                           |   |  |  |  |          |          |   |

# Annex II

## **Enumerator manual for asset modules**

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### **Household-level interview**

#### Section A

Livestock ownership at the household-level

#### Section B

Apartment/condo ownership at the  
household-level

#### Section C

Livestock ownership at the household-level

#### Section D

Consumer durables ownership at the  
household-level

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### **Individual-level interview**

#### Section E

Land ownership at the individual-level

#### Section F

Apartment/condo ownership at the  
individual-level

#### Section G

Livestock ownership at the individual-level

#### Section H

Durables and valuables ownership at the  
individual-level

#### Section I

Mobile phones

#### Section J

Financial assets

**Annex II Enumerator manual for asset modules**

# **Household-level interview**

## **Section A**

# **Land ownership at the household-level**

**Respondent:** The respondent identification is the identity of the person responding for the respective parcel, recorded from the household roster. The respondent should be the most knowledgeable household member for each parcel. Therefore, the respondent may differ for each parcel.

The optimal respondent should be identified through a discussion amongst the enumerator and all adult members of the household (or as many as possible) prior to beginning the module. During this meeting, the roster of parcels should be completed and the optimal respondent identified for each.

**Definition:** A **parcel** is any piece of land, of one land tenure type, entirely surrounded by other land, water, road, forest or other features not forming part of the holding or forming part of the holding under a different land tenure type.

- Q1** This is the screening question to determine whether any member of the household uses, owns, or has use rights to any parcel, either exclusively or jointly with someone else. Apartment/condos are units in buildings that are not associated with any parcel.
- Q2** The roster of parcels should contain all parcels for which any household member(s) holds use rights or owns at the time of the interview. The first parcel listed should be the parcel on which the household resides. The parcel name must be unique to each parcel, as it will be used to refer to the specific parcel throughout the remainder of the module. And in the individual-level land module each adult in the household must be able to clearly understand the parcel under discussion.
- Q3** Identify if the dwelling lies on this parcel.
- Q4** Here we are trying to get at the legal tenure status of the parcel, as reflected in the official categorization by the Government. These categories regulate formal property rights. It may be necessary to read the responses to the respondent in order for them to understand.
- Q5** This identifies how the household acquired the parcel of land.
- Q6-8** These questions pertain to the use of the land. In some cases, such as when land is rented out, the actual use may not be known, hence the inclusion of the “Don’t Know” response. However, wherever possible, the actual use of the land should be recorded.
- Q10** Ask the respondent to estimate the area of the agricultural parcel. Record the response in the unit that they provide to you.

## Section B

### Apartment/condo ownership at the household-level

**Respondent:** *The respondent identification is the identity of the person responding for the respective apartment/condo, recorded from the household roster.*

- Q1** This is the screening question to determine whether any member of the household owns any apartment/condo, either exclusively or jointly with someone else. Apartment/condos are units in buildings that are not associated with any parcel.
- Q3** This identifies if the apartment/condo is located in an urban or rural area.
- Q4** Ask the respondent what the apartment/condo is used for. Do not read out the codes for use of real estate but allow the respondent to answer this question and code the response appropriately.

## Section C

### Livestock ownership at the household-level

**Respondent:** *The respondent should be the most knowledgeable household member regarding livestock owned by the household. The optimal respondent should be identified through a discussion amongst the enumerator and all adult members of the household (or as many as possible) prior to beginning the module.*

- Q1** This is the screening question to determine whether **any** member of the household owns any livestock, either exclusively or jointly with someone else. Note that someone may own livestock that is not kept on the premises; the livestock may be in another location in the care of a caretaker. All livestock present at the farm or away should be counted. Also note that livestock does not include pets. Ask Q1 for all categories of livestock listed before proceeding to the remaining questions in the module. If nobody in the household owns **any** of the categories of livestock listed, skip to section D.
- Q2** Record the **total** number of animals of each category of livestock owned by **any member** of the household. Again, this includes all livestock present at the farm or away.

## Section D

### Consumer durables ownership at the household-level

- Q1** This is the screening question to determine whether **any** member of the household owns any consumer durables, either exclusively or jointly with someone else.
- Q2** Record the **total** number of items of each category of durable owned by **any member** of the household.

## **Annex II Enumerator manual for asset modules**

# **Individual-level interview**

**Respondent:** The remaining modules are administered **separately and alone** to all adults in the household 18+ years and above (including household heads and spouses that are less than 18 years of age). Some of the questions are sensitive and we must make sure respondents feel comfortable responding honestly especially to questions on ownership and rights.

**Enumerator:** Male enumerators will interview male respondents and female enumerators will interview female respondents.

**Interview Setting:** Present questions in such a way that the respondents feel comfortable sharing any **hidden assets** (do not sure hidden assets terminology) DO NOT SHARE INFORMATION FROM THESE CONFIDENTIAL INTERVIEWS WITH OTHER HOUSEHOLD MEMBERS OR NON-HOUSEHOLD MEMBERS. The last question of each section asks the enumerator to enter the appropriate code for the ability of the **respondent** to be interviewed alone (without other household or non-household members present). Although the module should be administered while the respondent is alone, please answer this question **truthfully** in case it was not possible to administer in private.

### **Logistical Considerations:**

Approaching communities & respondents: clearly communicating objective of the survey.

**Scheduling interviews:** Enumerators must strategically plan the best timing for scheduling interviews with all adults in every household. After the selection of the LSMS+ households they should identify the number of eligible adults in each household and the gender composition to determine workload. Individual interviews should **not** all be saved for the last day in the EA, but should be conducted throughout the days in the EA.

**Administration of questionnaire in CAPI:** CAPI will feed forward the parcel, apartment, livestock, and durables rosters built at the household-level to the individual-level modules.

## **Section E**

# **Land ownership at the individual-level**

All parcels rostered in Section A are fed forward to each individual interview in Section E. The parcel name, use, and acquisition status are intended to assist each respondent in identifying the parcel of land under discussion.

**Q1** This is the screening question to determine whether the **respondent** uses, owns, or holds use rights to each of the parcels, either exclusively or jointly with someone else. The enumerator asks the respondent specifically “do **you** use, own...” for each parcel owned by the household. The module must be administered one parcel at a time.

**Q2-4** **Reported Ownership** This is the screening question to determine whether the respondent **owns** each of the parcels, either exclusively or jointly with someone else. If the answer to Q2 is “yes” and they record that it is jointly owned in Q3, then record up to 3 additional household members as joint owners and the number of outside males and number of outside females. **We will be asking additional information about ownership, so the owner in this question is not necessarily the person who is listed on the title as the owner. We want the person or people within the household and outside the household who claim ownership.**

**Q5-6** **Documented Ownership** We are asking whether there is an ownership document for the parcel of land and what type of document it is. It may or may not have the name of someone in the household on it.

**Q10** Indicate whether the respondent was able to produce the ownership document for confirmation purposes by entering the appropriate code. It is critical that the enumerator does their best to view the document, but also must respond truthfully.

**Q11** **Right to sell** First identify if the respondent has the right to sell the parcel even if he or she needs to obtain the consent or permission of someone else. If the respondent does not have the right, skip to the next question. Then enter ‘1’ if this person needs the permission or consent of someone else to sell the dwelling and plot of land or ‘2’ if the person does not need permission/consent. If ‘1’, enter the ID code(s) of the person(s) from whom permission/consent is needed. Record up to 3 additional household members with the right. The number of outside males with this right and the number of outside of the household females with this right are also listed.

The individual **providing** permission/consent to the respondent to exercise a particular right is the individual that has the final say/veto power in whether that particular right (e.g. selling a parcel) can be exercised by another individual.

The individual **seeking** permission/consent from another individual to exercise a particular right is the individual that CANNOT act on his/her own AND that needs to receive authorization from another individual to exercise a particular right.

*One individual member simply informing another individual of his/her plans to sell, rent out, use as collateral or make improvements in a parcel is NOT the same as seeking permission!*

**Q12** **Right to bequeath** When an owner(s) bequeaths an asset, it means that he/she has the de facto ability to transfer rights to the parcel either in life or in death. See further instructions in Q11.

**Q13** **Right to Use as Collateral** When an owner(s) uses an asset as collateral, it means that he/she provides the asset as a security/guarantee for obtaining loans or other obligations. See further instructions in Q11.

- Q14** **Right to Rent** Out When the owner(s) rents out an asset, it means that he/she bestows the use rights of the asset onto another person(s) for a specific period of time, in return for cash or in-kind benefits. See further instructions in Q11.
- Q15** **Right to Make Improvements/Invest** See further instructions in Q11.
- Q17-19** **Decision-maker(s) for plots** Ask the respondent if they are among the decisionmakers for any of the plots located on the parcel about the timing of crop activities, crop choice and input use. First identify if the respondent would be among those deciding about the timing of crop activities, crop choice and input use on any part of the parcel and, if so, they should list up to 3 additional household roster IDs and the number of outside males and the number of outside of the household females that would also be among the decisionmakers.
- Q20-21** **Real estate market** Ask whether land owners sell or rent out dwellings in and around the community and if the respondent is informed regarding the value of recent sales of dwellings or rental transactions. Enter the appropriate code.
- Q22** **Value of parcel** Ask the respondent to estimate in the country's currency how much could be received for the parcel if it were to be sold today. The estimate should be based on the location and condition of their particular parcel. If he/she can't estimate this, enter "dk" ("does not know").
- Q23-25** **Economic Ownership** Ask the respondent, if the parcel were to be sold today, would they be among the decisionmakers on how the money would be used. Note that this question is hypothetical so the respondent should answer even if there are no plans to sell the parcel. First identify if the respondent would be among those deciding on how to use money from the sale of the parcel and, if so, they should list up to 3 additional household roster IDs and the number of outside males and the number of outside of the household females that would also be among the decisionmakers.
- Q26** This last question of each section identifies the likelihood of the respondent involuntarily losing ownership/use rights to the parcel in the next five years. Responses are made on a scale from 1 to 5, with 1 being not at all likely and 5 being extremely likely. Responses should be specific to the respondent's individual rights to the parcel, not the household's rights.

## Section F

### Apartment/condo ownership at the individual-level

All apartments/condos rostered in Section B are fed forward to each individual interview in Section F.

- Q10-14** See section E questions 11-15.
- Q15-17** See section E questions 20-22.
- Q17** Ask the respondent to estimate in the country's currency how much it would cost to construct this type of apartment/condo today.
- Q18-20** See section E questions 23-25.

## Section G

# Livestock ownership at the individual-level

- Q1** These responses are carried over from Section C Question 1, Number of Livestock owned by any member of the household. It will be used as a reference point for the remaining questions in the section.
- Q2** This is the screening question to determine whether the **respondent** owns any livestock, either exclusively or jointly with someone else. The enumerator must read the categories of animals listed and reference the total number of animals owned by the household. The enumerator asks the respondent specifically “do **you** own...” any of the livestock type owned by the household. THIS QUESTION WILL BE ENABLED IF THE RESPONSE IN QUESTION 2 IS GREATER THAN ZERO AND NOT MISSING.
- Q3** The remainder of the module is broken down by ownership type – individually owned versus jointly owned. In question 3, the respondent is asked “Are any of the livestock owned **exclusively** ...” as reported in question 1.
- Q4** This question is asked if the respondent reported “yes” in question 3 that they **exclusively** own any livestock of a particular type. In this question they record the total livestock that they **exclusively** own. This number must be less than or equal to the total number of livestock owned by the household reported in question 1.
- Q5** Ask the respondent to estimate in the country’s currency how much they would receive if they were to sell all livestock **exclusively** owned by the respondent. This is the value across the total number of animals recorded in question 3.
- Q6** The remainder of the questions in the module ask about livestock jointly owned by the respondent. In question 7, the respondent is asked “Are any of these livestock **jointly** owned, with someone else...” any of the livestock owned by the household as reported in question 1. Joint ownership refers to other owners both inside and outside of the household. THIS QUESTION WILL BE ENABLED IF THE RESPONSE IN QUESTION 1 IS GREATER THAN ZERO AND NOT MISSING.
- Q7** This question is asked if the respondent reported “yes” in question 6 that they **jointly** own with anyone else any livestock. In this question they record the total livestock that they **jointly** own with anyone else. This number must be less than or equal to the total number of livestock owned by the household reported in question 1.
- Q8** Ask the respondent who else both inside and outside of the household owns the livestock with them. Record the ID codes of the household members that jointly own this livestock with the respondent and record the number of male and female outside household members that jointly own the livestock separately. This should be joint owners for **any** of the animals among this livestock type.
- Q9** Ask the respondent to estimate in the country’s currency how much they would receive if they were to sell all livestock **jointly** owned by the respondent.

## **Section H**

# **Durables ownership at the individual-level**

The first column for consumer durables is the responses carried over from Section D Question 2, Number of Durables owned by **any** member of the household. It will be used as a reference point for the remaining questions in the section.

- Q1** This is the screening question to determine whether the **respondent** owns any durables, either exclusively or jointly with someone else. The enumerator must read the categories of durables listed and reference the total number of animals owned by the household. The enumerator asks the respondent specifically “do **you** own...” any of the durable type owned by the household. THIS QUESTION WILL BE ENABLED IF THE RESPONSE IN QUESTION 2 IS GREATER THAN ZERO AND NOT MISSING. Ask the respondent to estimate in Cambodian Riels how much could be received for all of the items they own in each category of durables or valuables if they were to be sold today. This is a sensitive question so approach the question with care.
- Q2** Record the number of each type of consumer durable or valuable that the respondent owns, either exclusively or jointly with someone else.
- Q3** Ask the respondent to estimate in the country’s currency how much could be received for all of the items they own in each category of durables or valuables if they were to be sold today. This is a sensitive question so approach the question with care.

## **Section I**

# **Mobile phones**

- Q1** **Ownership of Mobile** Phones This is the screening question to determine whether the respondent owns any mobile phone, either exclusively or jointly with someone else. This refers to mobile phones in working condition, meaning able to be charged to initiate at least one call.

- Q2** Record the number of mobile phones that the **respondent** owns, either exclusively or jointly with someone else.

***The remainder of the module is administered at the phone level. There is one row for each mobile.***

- Q7** Ask the respondent if they can access the internet on this mobile phone. This question is trying to assess the quality of the phone.

- Q8** Ask the respondent to estimate in the country’s currency how much could be received for the mobile phone if it were to be sold today.

## **Section F**

# **Financial assets**

### **Q1      Ownership of financial assets**

This is the screening question to determine whether the respondent owns a financial asset, either exclusively or jointly with someone else. The enumerator must read the categories of financial assets listed. Ask Q1 for all categories of financial assets listed before proceeding to the next question in the module. If the household member does not own **any** of the categories of financial assets listed, or the respondent doesn't know or refuses to respond, skip to the next individual-level module. Even if the respondent's name is not officially on the account, but they consider themselves an owner, they should record "yes".

*The remainder of the module is administered at the account level.*

**Name of Financial Institution.** Record the name of the financial institution on each row so that the combination of the name and financial asset code in Q3 uniquely identify each account.

**Q3      Financial assets codes** Enter the codes of financial assets that were identified as being by the respondent in Q1. If 2 or more of the same financial **asset** are owned (for example, if two bank accounts are owned within the household), enter the code for each asset within the category (for example, for each bank account).

**Q4-5** These questions refer to reported ownership.

**Q6-8** These questions refer to documented ownership and whose names are on the account.

**Q9      Value of financial asset** Ask the respondent to estimate in the country's currency the current value of the account. This is a sensitive question so approach the question with care.

**Q10     Knowledge of financial asset** Ask the respondent whether there is anyone in his/her household above the age of 18 who does not know about the financial asset the respondent owns, either solely or jointly with another person(s). If 'no', skip to the next financial asset or Q13 if there are no other financial assets owned by a member of the household.

**Q11     Sole knowledge of financial asset** Ask the respondent whether he or she is the only household member above the age of 18 who knows about the financial asset he or she owns. If 'yes', skip to the next financial asset or to Question 13 if there are no other financial assets owned by a member of the household.

**Q12     ID of person(s) who do not know about financial asset** Enter the household roster ID(s) of the person(s) above the age of 18 who do not know about the respondent's financial asset. Up to 3 IDs can be listed.

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# Annex III

## Descriptive tables for monitoring data quality

# Sample tables

## **Table 1**

**Distribution of households**

## **Table 2**

**Households with individual interviews**

## **Table 3**

**% respondent answered for him/herself**

## **Table 4**

**Financial accounts incidence**

## **Table 5**

**Mobile phone incidence**

## **Table 6**

**Household parcel incidence**

**Table 1a Distribution of households**

According to # of adults interviewed

| Parcel module                                | Total | % |
|--|-------|---|
| <b>Households interviewed</b>                |       |   |
| <b>All eligible adults interviewed</b>       |       |   |
| <b>4 Adults</b>                              |       |   |
| <b>3 Adults</b>                              |       |   |
| <b>2 Adults</b>                              |       |   |
| <b>1 Adults</b>                              |       |   |
| <b>Subset of eligible adults interviewed</b> |       |   |
| <b>3 Out of 4</b>                            |       |   |
| <b>2 Out of 4</b>                            |       |   |
| <b>1 Out of 4</b>                            |       |   |
| <b>2 Out of 3</b>                            |       |   |
| <b>1 Out of 3</b>                            |       |   |
| <b>1 Out of 2</b>                            |       |   |
| <b>0 Out of 4</b>                            |       |   |
| <b>0 Out of 3</b>                            |       |   |
| <b>0 Out of 2</b>                            |       |   |
| <b>0 Out of 1</b>                            |       |   |
| <b>Average # of adults interviewed</b>       |       |   |

**Table 1b Distribution of households**

According to # of adults interviewed

| Financial assets module                      | Total | % |
|--|-------|---|
| <b>Households interviewed</b>                |       |   |
| <b>All eligible adults interviewed</b>       |       |   |
| <b>4 Adults</b>                              |       |   |
| <b>3 Adults</b>                              |       |   |
| <b>2 Adults</b>                              |       |   |
| <b>1 Adults</b>                              |       |   |
| <b>Subset of eligible adults interviewed</b> |       |   |
| <b>3 Out of 4</b>                            |       |   |
| <b>2 Out of 4</b>                            |       |   |
| <b>1 Out of 4</b>                            |       |   |
| <b>2 Out of 3</b>                            |       |   |
| <b>1 Out of 3</b>                            |       |   |
| <b>1 Out of 2</b>                            |       |   |
| <b>0 Out of 4</b>                            |       |   |
| <b>0 Out of 3</b>                            |       |   |
| <b>0 Out of 2</b>                            |       |   |
| <b>0 Out of 1</b>                            |       |   |
| <b>Average # of adults interviewed</b>       |       |   |

## Table 1c Distribution of households

According to # of adults interviewed

|  |  |
|--|--|
| <b>Mobile phones module</b>                  |  |
| <b>Households interviewed</b>                |  |
| <b>All eligible adults interviewed</b>       |  |
| <b>4 Adults</b>                              |  |
| <b>3 Adults</b>                              |  |
| <b>2 Adults</b>                              |  |
| <b>1 Adults</b>                              |  |
| <b>Subset of eligible adults interviewed</b> |  |
| <b>3 Out of 4</b>                            |  |
| <b>2 Out of 4</b>                            |  |
| <b>1 Out of 4</b>                            |  |
| <b>2 Out of 3</b>                            |  |
| <b>1 Out of 3</b>                            |  |
| <b>1 Out of 2</b>                            |  |
| <b>0 Out of 4</b>                            |  |
| <b>0 Out of 3</b>                            |  |
| <b>0 Out of 2</b>                            |  |
| <b>0 Out of 1</b>                            |  |
| <b>Average # of adults interviewed</b>       |  |

**Table 2 Households with individual interviews**

| Total households | With any individual-level interview | Among households Interviewed w/ a couple |                       | Both members of couple interviewed |
|------------------|-------------------------------------|--|-----------------------|------------------------------------|
|                  |                                     | Any                                      | More than 1 Interview |                                    |
|                  |                                     |  |                       |                                    |

**Table 3 % Respondent answered for him/herself**

| Module | Education | Health | Labor |
|--------|-----------|--------|-------|
| All    |           |        |       |
| Male   |           |        |       |
| Female |           |        |       |

**Table 4 Financial accounts incidence**

| Asset type                        | Mean per household | Mean per eligible individual |
|-----------------------------------|--------------------|------------------------------|
| Checking account                  |                    |                              |
| Savings account                   |                    |                              |
| Microfinance account              |                    |                              |
| Informal savings account          |                    |                              |
| Other (specify)                   |                    |                              |
| Own any type of financial account |                    |                              |

**Table 5 Mobile phone incidence**

|   |  |
|---|--|
| Mean mobile phones per household*                                 |  |
| Proportion of eligible individuals with at least one mobile phone |  |
| Proportion of households with at least one mobile phone           |  |

\* possible double counting if own jointly

**Table 6 Household parcels incidence**

|   |  |
|---|--|
| Mean plots per household  |  |
|   |  |
| Proportion of eligible individuals owning at least 1 parcel of land |  |
| Proportion of households owning at least 1 parcel of land           |  |

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