

LESSONS FROM THE FIELD: IMPLEMENTING INDIVIDUAL ASSET SURVEYS IN ECUADOR, GHANA, INDIA AND UGANDA

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Development Cooperation
Ministry of Foreign Affairs

Funded by MDG3 Fund under the
Dutch Ministry of Foreign Affairs



B A S I S

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Suggested Citation: Cheryl Doss, Carmen Diana Deere, Suchitra J. Y., Abena D. Oduro, and Marya Hillesland. *Lessons from the Field: Implementing Individual Asset Surveys in Ecuador, Ghana, India and Uganda*. Bangalore: Indian Institute of Management Bangalore. 2011.

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"This publication was made possible by support provided in part by the US Agency for International Development (USAID) Agreement No. EDH-A-00-06-0003-00 awarded to the Assets and Market Access Collaborative Research Support Program (AMA CRSP). All views, interpretations, recommendations, and conclusions expressed in this paper are those of the author(s) and not necessarily those of the supporting or collaborating institutions."

Acknowledgements

This document is based on work by many people. All the members of the project teams in the four countries were involved in collecting the data and discussing the challenges that they faced in the data collection. The project teams included:

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Introduction

This field guide outlines the key lessons learned from implementing household surveys that collected individual level asset ownership data in four countries.

Three of the surveys, in Ecuador, Ghana, and Karnataka, India were implemented by the *In Her Name: Measuring the Gender Asset Gap* project funded by the Dutch Government MDG3 fund. The fourth was implemented in Uganda by the *Pathways to Secure Access to Assets: Land Tenure and Beyond* project funded through the Assets and Market Access Collaborative Research Support Program of USAID.

All four questionnaires were based on a template designed by three of the project leaders in a previous study.¹ In each country, extensive background work included the study of the legal marital and inheritance regimes and qualitative field work involving focus groups and key informant interviews. The four main themes of the focus groups were the accumulation of assets over the individual life cycle; the importance of assets; the market for assets; and household decision-making over asset acquisition and use. The qualitative work was essential in adapting the generic template to specific contexts.

One of the challenges of this overall project has been to find ways to obtain data that is comparable across countries and is also appropriate and relevant in the specific contexts. One key purpose of the *In Her Name* project was to collect data that could be used to calculate the gender asset and wealth gaps across countries; thus, the data had to be comparable. The Uganda data was collected first and not in the context of the comparative project; thus, although based on the same template, it is substantially different from the other three and only some comparable measures of the gender asset gaps can be derived from it.

This guide will be useful for two sets of researchers. First, for those designing their own surveys that include individual level questions on asset ownership, this guide provides insights into what did and did not work. Frequently when researchers make their survey instruments available to others, information is not available on whether the questions were successful or not, which can be frustrating to those designing their own surveys. Second, this guide will be useful to those who are seeking to use the data sets from the four surveys discussed. The guide is designed to accompany the four sets of questionnaires.

The first section of this document provides the background on the four surveys, including

information about the sampling. It is followed by a detailed discussion of the four questionnaires, highlighting the aspects that worked well and those that did not. The third section makes recommendations regarding the minimum questions on individual level asset ownership that should be asked in all surveys and the questions that are needed to calculate the gender gaps. The final section discusses the issues and lessons regarding implementation of a large sample individual level asset survey, focusing on issues that are specific to surveys with this purpose. In each section, the general lessons are discussed, followed by particular issues regarding each country. Two appendices are included: the first provides a description of the samples of three of the surveys, and the second provides the list of minimum questions needed on individual level asset ownership to calculate gender asset and wealth gaps.

Background on the Surveys

The surveys were nationally representative in Ecuador and Ghana and representative of the state of Karnataka, in India. The sampling strategy was designed, in part, so that the three surveys would be representative but also so that they would be comparable with other surveys conducted in the respective countries. The Uganda survey was implemented first and on a much smaller scale.

In each household, multiple individuals were interviewed.² It is generally the case that one individual has a good idea of most of the assets owned by household members. However, by asking a second person in a household, we are more likely to ensure that all of the assets are enumerated. It is not clear that “hidden assets” – assets that are being kept confidential from a spouse – will necessarily be identified, even by interviewing two or more people within the household.

In addition, the projects’ goals include identifying control over as well as ownership of assets. Thus, the surveys ask about individual level control over the assets. This also allows us to analyze whether household members agree on the ownership and the levels of control over assets that they each have.

The rest of this section provides specific information on the sampling framework of each of the four surveys. Appendix 1 provides details on the samples in each country.³

Ecuador: The 2010 Ecuador Household Asset Survey was based on a stratified random sample, with the primary sampling units being the (updated) 2001 national census blocks. These were characterized by socio-economic level based on an index of the proportion of household basic needs satisfied according to the 2001 census data, and drawn randomly within each category. The secondary sampling unit was the household and these were drawn with equal probability within each selected census block. Twelve households were interviewed per census unit and a household was replaced if there was a rejection or no one in the household could be located after three attempts.⁴ The sample of 2,892 households is representative of rural and urban areas and the two major regional geographic and population groupings of the country, the Sierra (highlands) and Coast.⁵ The survey was implemented by the survey consulting group, HABITUS, SA., and carried out between April and June 2010.

The survey employed two instruments, a household and an individual questionnaire. The household questionnaire was administered to the principal couple, defined as the adult⁶ pair (married or in a consensual union) who maintained the home and had the most knowledge about its assets, or in the case of unpartnered adult men or women, to the principal adult, similarly defined. Whenever possible, the principal couple completed the household questionnaire together. Each member of the principal couple or the unpartnered male or female head were then each administered separately an individual questionnaire. A total of 4,668 persons completed the individual questionnaire.

Ghana: The Ghana quantitative survey was implemented from May to July 2010 using the same enumerators and the two-stage sampling frame of a survey designed and implemented by Yale University and the Institute of Statistical, Social and Economic Research (ISSER) earlier that year. The sampling frame is based on 144 enumeration areas from the national census. In the first stage, enumeration areas were selected from Ghana's ten administrative regions. The number of enumeration areas selected was determined by each region's share of the total population, with the exception of the Upper East Region where the number of enumeration areas selected was reduced due to the conflict in parts of the region. In the second stage, 15 households were randomly selected from each of the enumeration areas.

For most households, two individuals were interviewed. A primary respondent was selected by asking members who in the household is well informed about the household's asset holdings. If the primary respondent was married, the secondary respondent was the spouse of the primary respondent as long as the spouse was at least 18 years or older and also a member of the household. If the primary respondent was single (never married, divorced, separated, or widowed), or if the spouse was not a member of the household, then another adult member of the opposite sex who is well-informed about the economic and asset holding of the household was interviewed as the secondary respondent. In all a total of 3,288 individuals in 2,170 households were surveyed.

Karnataka: In Karnataka, the quantitative survey was implemented from May 2010 to January 2011 by Sigma Research and Consulting, a survey agency with wide presence across the country. A stratified random sampling was used with the first stratum being the four agro-climatic regions of the state (Northern Plateau, Southern Plateau, Western Ghats and Coastal Areas). Within each region, districts were selected randomly, largely proportional to the total number of districts in that region. The survey also included Bengaluru city⁷ in order to represent the only metropolitan area (defined as an area with a population greater than 10,00,000) in Karnataka.⁸

With the exception of Bengaluru, each district was further stratified into urban and rural areas.

In rural districts, two administrative divisions, or taluks, were selected using the Population Proportionate to Size (PPS) sampling method. Within each taluk, four villages larger than the median and four villages smaller than the median population were selected for the study using the same method. A final sample of households from each village was randomly selected after undertaking household enumeration of either the entire village or some segments within it depending on the size of the village.

Survey Questionnaires

In urban districts, the towns in each district were divided into two strata – those with a population of more than 100,000 and those with a population less than 100,000; one town in each stratum was selected randomly. The electoral booths in the towns were used as the Primary Sampling Unit (PSU). From among all the booths in a town, four were randomly selected for the survey. Within the four electoral booths, the final sample of households was randomly selected after undertaking household enumeration of either the entire booth or some segments within it depending on the size of the booth. Rural and urban sampling was with reference to Census 2001 figures.

Within each metropolitan region of Bengaluru, wards were randomly selected. This was proportional to the total number of wards in the region, so as to select a total of 12 wards across Bengaluru. In each ward, two electoral booths were selected randomly. Households for survey within each booth were selected using the same procedure as in the rural and urban areas.

In each household, two adult individuals (over 18 years of age) were interviewed, one as the primary respondent and the other as the secondary respondent. The primary respondent was identified by the household members as the person who was most knowledgeable about the economic circumstances of the household. If the primary respondent was married, then her or his spouse was selected as the secondary respondent. If the primary respondent was unmarried, then a second adult member was selected, preferably a member of the opposite sex. Knowledge about household assets was used as a filter in the choice of the secondary respondent when he/she was not a spouse of the primary respondent. A total of 7,185 individuals in 4,110 households were surveyed.

Uganda: The Uganda survey was administered in 2009 by the School of Forestry at Makerere University. Students were trained as enumerators. One district was chosen in each of three of the four regions of Uganda. (The North was not included due to the conflict occurring at the time.) In each district, four villages were sampled, ensuring that the various land tenure systems in Uganda were represented. Households were then randomly selected from each village. One primary respondent was chosen in each household and up to three other adults were interviewed. A total of 770 individuals in 381 households were interviewed.

The questionnaires were specifically designed to capture a wide array of information so that the projects could begin to determine which questions were most useful in a range of contexts. Thus, we would not expect that other surveys would include all of these questions, but this guide will provide some suggestions on which questions are appropriate in which contexts and to answer which research and policy questions. These guidelines are based on our experience in implementing the surveys in the field and initial analyses of the data. Further statistical work on the various measures is underway.

The section begins by discussing the structure of the questionnaire. It then provides details on each survey module.

Structure of the Questionnaires

This section has three parts. Part one discusses the two components of the questionnaires. Part two details the questions on ownership, valuation, and acquisition of assets, since they are similar across the various assets. Finally, part three discusses why the questionnaires were deliberately designed to move away from the notion of headship and some of the challenges this decision presented. The following section goes through each of the various modules.

Household Asset Inventory and Individual Level Questionnaires

The questionnaires were designed to have two components: an asset inventory and an individual level questionnaire.

The asset inventory was designed to be asked once per household. In Ecuador, the preference was for the principal couple to respond to the inventory together.⁹ Elsewhere, the intention was for one individual to respond to the inventory. (This person was then referred to as the “primary” respondent in several of the surveys). It was noted if others were present or participating in the interview. Then, both those answering the asset inventory and the individual respondents answered the individual questionnaires.

In Uganda, the questionnaire was structured slightly differently. After field testing, the inventory and individual questions were integrated into one questionnaire for the primary

respondent. It was then organized by asset, asking first the inventory questions and then the individual-level questions. The other respondents then answered the same set of individual-level questions.

The Ecuador household questionnaire also ended up being longer than those from Ghana and Karnataka, since in addition to the assets inventory, information on the acquisition of most assets was asked in the household, rather than the individual, questionnaire. Since the aim was to complete the household questionnaire with both spouses present, it made sense to gather as much non-sensitive data as possible while both were together in Ecuador.

Because the distribution of questions between the household asset inventory and individual level questionnaires differed across the countries, the discussions below are organized by question type, rather than by level.

One challenge in all four surveys was that the asset inventory information needed to be entered on the multiple individual questionnaires within a household. This was handled in different ways by the different surveys. The following explains how each country handled the two sets of questionnaires.

Ecuador: Due to cost constraints, there was only one enumerator per household, who first completed the household questionnaire and then interviewed each of the members of the couple in turn, to complete the individual questionnaire. It was only necessary to copy the asset information onto the individual questionnaire when one member of the couple had not been present for the assets inventory; in this situation, the second respondent was asked during the individual interview about the ownership of each of the assets reported previously.

Ghana: Both enumerators were usually present at the inventory interview and both wrote out the primary respondent's responses in their separate booklets. The dual entry was useful when there was missing information in one that was found in the other, but meant that additional time was needed for data entry and more time was spent addressing discrepancies between the booklets.

Karnataka: Similar to Ghana, both enumerators were present during the household inventory questionnaire and recorded this information in their respective booklet. However, only the primary respondent information was actually entered into the database; the secondary information was kept as a reference for checking discrepancies. Only those assets added by the secondary during the individual interview (Secondary Additional (SAD) assets in the Karnataka questionnaire) were entered in the database. Different colored covers were used to distinguish between the primary and secondary questionnaires.

We learned that it is critical to make sure the ownership questions were worded in the same way for everyone. The household asset inventory typically asked the respondent to list who the owners were. The question in the individual questionnaire was usually whether the respondent was an owner. It is important for the analysis to ensure that the primary respondent answers this same question about his/her individual ownership. Different wording between the questionnaires complicates the data analysis and makes it more difficult to compare the owners reported by the primary and secondary respondents.

Karnataka: In the asset inventory, the primary respondent was asked, 'To whom does this asset belong?' and in the individual sections, both the respondents were asked, 'Do you consider yourself an owner of this asset?' The latter question was asked of the respondents in the respective individual sections only if they were not identified as owners in the asset inventory. The wording of the question makes a difference to how the respondent might answer. The former is a somewhat detached and impersonal question while the latter is more inclusive asking specifically about the respondent's thoughts on her/his ownership.

Questions on Ownership, Valuation, and Acquisition of Assets

The surveys asked questions to determine who owned the assets in the household, to estimate the value of the assets and to understand how the assets were acquired. These issues were similar for all of the assets.

Ownership: In the asset inventory, the respondents identified who the owner or owners were of each asset. This results in a measure of who the respondent perceives the owners to be. They were allowed to list multiple owners for each asset or to respond, "everyone in the household." In addition, for real estate they were

asked if there was any type of ownership document and whose name(s) were on the document. For real estate, the compilation of the data includes both this measure of ownership as reported in the asset inventory (referred to as “reported ownership” or “perceived ownership” in the various reports) and a measure of legal or documented ownership.

Valuation: Data on the value of each asset was collected, but this varied across countries as to whether this was collected in the inventory or at the individual level. Three valuation measures were used: the price that would be received if the asset were to be sold at the time of the survey (market price), the replacement cost, and the rental rate. The potential market price was asked for all assets; other valuation questions were asked for assets as appropriate. For the replacement value of the principal residence, the Ecuador questionnaire included in the replacement cost both the cost of construction as well as the current value of the lot on which it was situated, whereas the Karnataka and Ghana questionnaires only asked about the construction costs.

Acquisition of Assets: The modes of acquisition included inheritance, purchase, gift/transfer, or government or other program. If the asset was acquired through inheritance or gift/transfer (at time of marriage or otherwise), respondents were then asked from whom it had been received. For purchased assets, follow-up questions focused on how the purchase was financed and whose earnings or savings were used.

Ecuador: The valuation questions were asked in the asset inventory. Field work revealed that the best responses were obtained when the couple was given the opportunity to discuss the value together. This is partly because of the gendered division of labor; each person was more likely to know the market values for the assets which they directly utilized, purchased and/or sold themselves. It is also related to the fact that men and women often have different social networks. Women, for example, seemed more likely than men to know about the price for which homes similar to their own had recently sold in the neighborhood, while men seemed more familiar with agricultural land prices. Allowing each to share their knowledge and discuss almost always produced an answer by consensus. In the case where one member of the couple was not present for the inventory, and that person considered him or herself to be an owner or co-owner of the asset in question, he/she was then asked to give their valuation estimates in the individual questionnaire. Thus for 27.5% of household we have separate estimates by the man and woman of the principal couple and can compare these responses.

Ghana: While the mode of acquisition for most of the assets was asked at the individual level, the mode of acquisition for the dwelling was asked at the inventory level. All modes of acquisition questions should have been placed in the individual questionnaire. Otherwise, it is difficult to attribute modes of acquisition if there are multiple owners.

Uganda: Particularly for land, many women reported that they obtained land through marriage. This was usually land that was considered to be owned jointly with her husband, but the ownership documents, if any, usually only listed the husband’s name. It was also not always clear if inheritance referred to the fact that the woman herself inherited the land or her husband had inherited it and she was now farming it with him. Although the questionnaire asked from whom the land had been inherited, there were sufficient missing answers to make it difficult to analyze. With limited markets for many assets in rural areas, the valuation data was only collected for a small number of assets.

Notion of Headship

The questionnaires were deliberately designed to move away from the notion of headship as it is often used to compare male and female-headed households. Typically, the use of male and female headed households as the comparison conflates male headed households with households headed by a couple. Female headed households are almost always defined as those without an adult male present.

Two approaches are then possible. One would be to identify dual headed households and single headed households. Many countries in Latin America and Europe have moved towards considering dual headed households legally as those in which there is a primary couple. Then male headed households are defined as those headed by a lone male (not a primary couple). The majority of households thus result being classified as dual headed or couple headed households.

A second option is to move away from the notion of headship altogether and to simply identify a reference respondent. This may be especially appropriate in contexts in which there is not necessarily either an individual head or a primary couple. Multi-generational households and many extended family households might fit this description.

Thus, questions were not asked explicitly to identify the head of the household. Analysis has

focused on comparing couple headed households with those headed by individual men or women. This helps to resolve the problem of conflating male headed households with those headed by a couple.

The respondent who answered the asset inventory was not necessarily the head of the household. Thus, the ID codes that were used throughout the questionnaire were in reference to this respondent and not someone designated as the household head. For example, in the case of Ecuador, ID 01 simply refers to the first member of the couple who agreed to be interviewed and 02 to his or her spouse.

This procedure met with varying degrees of success. It required substantial retraining of the enumerators. In all four of the countries, the enumerators were used to working with the person considered to be the head of household as the reference person and thus some confusion resulted from our deviation from this practice.

To avoid such confusion, one option would be to allow the primary respondent to designate a reference person, which may or may not be him or herself. The reference person is important because the relationships of others within the household are defined in relation to this person. While there is some value in encouraging people to move beyond the concept of male headship, this may be best done in the analysis rather than in the data collection.

Ecuador: The survey used the dual headed household model for households headed by a couple and designated the first person to consent to the interview as the reference person. But in official surveys, the head (the male head if there is one) is always the first respondent.

Ghana: In practice, the primary respondent was usually the person seen as being the head of the household. Individuals typically were not willing to respond unless the head was there.

Karnataka: Most surveys identify and interview the head of household, typically the oldest male member. It was time consuming to train enumerators to move away from this concept and approach households asking them to identify a primary respondent who could be a man or a woman. This needed to be stressed in every debrief meeting and refresher training session. Ultimately, the majority of primary respondents were those who would have been identified as the household head in other surveys. However, there were some households where this would not have been the case. For example, in some multi-generational households, the traditional head of the household would be the father, but the primary respondent was the son.

Uganda: Some women who were the primary respondents designated their spouse as the reference person, listing them first in the household roster. This led to confusion in the analysis.

The Uganda team would propose to allow the primary respondent to choose a reference person that could be someone other than themselves. Since the cultural norms in Uganda clearly define a “head of household” as the male head, insisting that the reference person was the respondent and not the person that they thought of as the household head led to confusion and possibly to some inconsistencies.

Survey Modules

This section details the modules in each of the surveys. This section has three parts. Part one describes issues in the household roster. Part two details the asset modules and part three discusses other modules the surveys included.

The order of the specific modules varied across countries. Where that seemed important or relevant, we comment on it here. In addition, there was some variation as to which questions were asked in the household questionnaire/asset inventory rather than in the individual sections. Table 1 lists the key sections in each survey and whether they were asked at the household or individual level.

We highlight the questions and issues that are specific to an individual-level asset survey. To the extent that these surveys are designed to collect information on both men and women, we also highlight areas where typical surveys may introduce gender bias.

Table 1. Location of Modules and Categories of Questions

Household roster	India HH	Ghana HH	Ecuador HH	Uganda HH
<i>Place of residence</i>				
Ownership	B	B	B	B
Ownership documents	HH	HH	HH	HH
Valuation	I	HH	B	
Acquisition	I	HH	HH	
<i>Agricultural land</i>				
Ownership	B	B	B	B
Ownership documents	HH	HH	HH	HH
Valuation	I	HH	B	HH
Acquisition	I	I	HH	I
Decision-making over use	I	I	I	HH
Rights over transactions	I	I		I
<i>Other real estate</i>				
Ownership	B	B	B	*
Ownership documents	HH	HH	HH	
Valuation	I	B	B	
Acquisition	I	I		
<i>Livestock and poultry</i>				
Ownership	B	B	B	B
Valuation	B	B	B	I
Acquisition	I	I	I	I
<i>Small agricultural tools</i>				
Ownership	HH	B	B	HH
Valuation	HH	B	B	HH
Acquisition		I		HH
<i>Large agricultural equipment</i>				
Ownership	HH	B	B	HH
Valuation	HH	B	B	HH
Acquisition	I	I		HH

<i>Businesses/Non-farm self-employment economic activities</i>				
Ownership	B	B	B	B
Valuation of business	I	HH	B	
Valuation of business assets	I	HH	HH	HH
Acquisition of business	I	I	HH	B
<i>Consumer durables</i>				
Ownership	B	B	B	B
Valuation	B	B	B	B
Acquisition	I	I	HH	B
<i>Financial assets</i>				
Ownership	I	I	I	B
Valuation	I	I	I	B
Acquisition	I	I	I	B
<i>Other modules</i>				
Loans Given	I	I	I	I
Debt	I	I	B	I
Migrants/Remittances		HH	HH	
Employment	I	I	HH	
Decision-making	I	I	I	
Marital and inheritance regimes	I	I	I	I
Shocks	I	I	HH	I
Conflict over assets		I		I
Subjective well being	I			
Children living outside the household		I		
Spouse living outside the household		I		
Consumption module		HH		

Notes:

HH: Household Questionnaire/ Asset Inventory

I: Individual Questionnaire

B: Both

The Uganda questionnaire was structured somewhat differently; HH here refers to questions asked only of the primary respondent; I refers to questions asked of each respondent individually.

* Additional dwellings were included under dwellings.

Household Roster

The household roster is designed to capture key information about all of the members of the household.

Each survey defined the household following the general practices in that country so that the results would be comparable with those generated by other surveys conducted in that country.

One common problem with many surveys is that a gender bias is introduced in the very definition of the members of households. Household members are usually defined as individuals who have lived within the household continuously for the past three (or six) months. However, often the head of the household is defined as a household member even if he does not meet this definition. Anyone else, including the wife, who is living away for more than the specified length of time would not be considered a member of the household. Since households are typically only defined as female headed if there is no adult male, it is very unusual for a female head to be away for this length of time.

Each survey in the four discussed here made separate choices about how to handle migrants; but the procedure was always parallel for men and women. Separate modules on migrants were included in the surveys in Ecuador and Ghana.

While surveys typically ask the marital status of everyone living in the household, it is important to ask a few additional details. The laws regarding property in many countries differ according to the type of marriage. Marriages may be customary, civil or religious. In addition, there may be a legal definition of a consensual union or cohabitation that confers legal rights, so it is important to know whether the couple would meet that legal definition.

In addition, to understand patterns of asset accumulation, it is important to understand marital history. Being widowed or divorced has an impact on asset ownership and this may not be captured if the individual reports being currently married or cohabiting. Our surveys had a module on marital history and inheritances. If these questions are not included in a separate module, it would be useful to ask in the household register whether or not the individual had been previously married.

Ecuador: The instructions failed to specify whether in asking about marital status we wanted to know their current status or what was listed on the ID card. This introduced confusion since a woman could be legally a widow but currently in a consensual union with a new partner. We should have asked for current status. In Ecuador, those in consensual unions who have lived together for at least two years and are not married to someone else have the same legal rights as couples who are married. In the survey, the common usage of two people living together was used, rather than the formal legal definition.

Ghana: In Ghana many widows and divorcees establish their own households and are not absorbed into another household. The current civil laws are silent on consensual unions. In the survey, a couple would be classified as being in a consensual union if they described themselves as such or if they had not completed the customary marriage rites. Enumerators were trained to find out if persons who claimed they were married had performed all the rites.

Uganda: There is substantial concern within Uganda about what happens to widows, especially in the context of high levels of HIV/AIDS. This survey methodology was not successful in capturing full information on widows. Relatively few widows were interviewed. Those that were interviewed were typically those that had been able to hold on to their residence or land after their husbands died. Those that were absorbed into another household were often not listed as being widowed. Thus, these results suggest that a different approach would be needed to understand the patterns of what happens to women who are widowed. It would be important to ask all women about their marital history – whether they had ever been widowed and what happened with regard to their assets at that time.

In addition, in Uganda, the roster did not do a good job of capturing whether households were polygamous. Since polygamous wives often live in separate dwellings, they may not be counted as being part of the same household.

The household roster also asked questions regarding schooling and current employment for all household members above a given age. These questions usually followed country-specific conventions. For example, Ecuador's survey was designed to be comparable to the 2004 Ecuador

Living Standards Survey; Ghana's survey is comparable to the Yale-ISSER survey and the fifth Ghana Living Standards Survey.

Asset Modules

The questions about assets were included in the household asset inventory, the individual questionnaire, or both, depending on the country. Thus, here the issues are discussed by the type of asset.

Each of the asset modules was designed to capture some basic information. Generally they identified the owner or owners of each asset and whether it was owned jointly or individually. The value of the asset was obtained by asking about the potential sale value at the time of the survey. For some assets, other valuation measures were also obtained, including replacement/construction or rental values. The mode of acquisition was also determined. Three of the surveys, Ghana, Karnataka and Uganda, also asked about the rights over key assets that were owned (or co-owned) by the respondent themselves, typically whether the respondent had the right to sell, bequeath, collateralize, or rent out the asset and whether they could do so individually or had to consult or ask permission to do so.

Principal Residence: Generally, the questions on the principal residence were relatively easy. In addition to the questions listed above, the inventory also included a question on whether there was an ownership document and whose name(s) were on it. There were some challenges with valuation in areas with limited housing markets.

In some areas, ownership of the urban housing lot and ownership of the dwelling may differ, and these may also have been acquired at different moments in time in different ways. For example, a person may inherit the plot of land and own it individually and then build a house on it jointly with the spouse. If this is an option, questions should be asked separately about the housing lot and the dwelling.

The *In Her Name* surveys asked only about the principal residence in this module; other dwellings were listed in the section on other real estate. In Uganda, people were allowed to list multiple dwellings in this section.

Uganda: In rural areas, people's dwellings are often located on their primary agricultural plot. Thus, they sometimes had difficulty identifying ownership of the residence separate from the ownership of the agricultural plot. A question should be incorporated that indicates whether the information about the residence is distinct from that about agricultural land.

Agricultural Land: For agricultural land, the inventory asked about all plots of land owned or farmed by anyone in the household.

The understanding of ownership varies considerably across contexts, especially with regard to land. In Ecuador, the full bundle of alienation rights is associated with owning land. But, especially in Africa, the bundles of rights are not necessarily vested in one individual. Much of the land is not titled and thus those considering themselves the owners may or may not have any formal documentation. Researchers often distinguish between "access to" land and "ownership of" land, claiming that women often only have access to land, typically through their father or husband, while the ownership rights belong to men. Thus, the surveys were designed to identify these different forms of access and ownership, by asking about the rights over the land and about decision-making with regard to the land.

The valuation questions on land were difficult in areas where the land markets are not well developed. Rental rates were collected as a means of potentially being able to estimate the present value of land. But rental rates are also difficult to obtain given the wide range of rental and sharecropping arrangements possible.

Ecuador: Because the bundles of rights were very clearly defined in Ecuador, additional questions that helped to identify the different components or definitions of ownership in the other countries were not asked. Information on agricultural decision-making was obtained for all owned parcels. Because questions about agricultural decision-making was not asked about parcels that were not owned, such as those rented or sharecropped, it is not possible to compare women in landowning families to those holding land in these other forms of tenure.

Ghana: The household asset inventory did not collect information on the IDs of owners of family land. In retrospect, we wish it had. Even though we probably would not have been given the list of the full gamut of owners (family here refers to the extended family) it would have been interesting to note if there was any sex bias in the list of owners provided. However, by linking information in the individual questionnaire to the asset inventory we can obtain information on whether a respondent who owns agricultural land has claimed ownership to a plot that is designated as family land in the asset inventory.

Uganda: Questions that distinguish among the different concepts of ownership, including self-reported ownership, documented ownership, and rights over land, help to disentangle these various concepts. Most surveys simply ask about land ownership, without defining it. In addition, in Uganda, it is important to ask about the land tenure system at the plot level (whether the land is under the *mailo*,¹⁰ customary, leasehold or freehold tenure system). The survey asked this at the village level, but not at the plot level, and there was some variation within villages that we did not capture. Finally, since individuals may be listed on ownership documents as either owners or as witnesses, it is important to specify in the question that we are interested in the names of the owners that are listed on the document.

Livestock: The survey modules, especially for Ecuador, Ghana and Karnataka, collected very detailed information on ownership for each type of animal. The questions asked how many animals of each type were owned by a household member and how many were owned jointly or individually and by whom. The consensus among the project teams is that this level of detail is rarely needed.

Detailed information on the ownership of each type of animal is necessary in order to calculate the patterns of individual and joint ownership using the animal (or asset) as the unit of analysis. When households own multiple animals under different patterns of ownership, this becomes very cumbersome very quickly. Detailed information on ownership of each chicken is probably not ever needed.

One simpler approach is that used by the Uganda survey. In the inventory, the number of each type of animals owned by anyone within the household was asked, then the respondent was asked to list all of the people who were owners. They were not asked to match the owners

with each animal. This approach allows for a calculation of the incidence gaps – the proportion of women who own animals and the proportion of men who own animals. It also allows for calculation of the share of owners who are women or men. It does not allow for the calculation of the share of animals that are owned by individual men, individual women, or owned jointly. Nor does it allow calculation of the gender wealth gap for livestock.

If more detail is needed, one approach would be to ask the primary respondent first to list the numbers of animals that he or she owns individually and then the number that he or she owns jointly. Then ask about the numbers of animals owned by anyone else in the household and list the owner or combinations of owners and the number of animals. An approximate valuation measure could be constructed by asking for the value of all of the animals of a particular type (cows, sheep, goats, etc.) and then apportioning it among the various owners. This simpler approach, however, would not capture any systematic differences in the value of livestock across men and women.

Similarly, in the questions about rights over animals, rather than asking about the rights over each animal, the respondents could be asked whether they had the various rights over any of that particular type of animal. In other words, “Do you have the right to sell any goat?”

On the mode of acquisition, rather than asking how each individual animal was acquired, it would be simpler to ask each respondent to list the various ways that he or she had acquired animals. This was the approach used in Uganda and Karnataka. This would provide information on whether the patterns of acquisition differ for men and women.

Ecuador: Each owner was asked about the form of acquisition of the three most important types of animals.

Ghana: People distinguished between chickens that were “assets” and those that were purchased to be eaten.

Karnataka: Although questions were asked about the right to slaughter animals, enumerators felt it was inappropriate, particularly with regard to cows. This question was not useful. Little information was also obtained on disposal of livestock and these questions would not be included if this survey is repeated.

Agricultural Equipment: The questions on agricultural equipment were again more detailed than needed for most purposes. For calculating the gender-asset gaps, most of the small tools are of little value and therefore it is not necessary to have detailed information on individual and joint ownership of each item. For agricultural surveys, it could be useful to know about the individual ownership of tools, since there has been relatively little information about the intra-household distribution of agricultural equipment and how it affects agricultural production.

For small agricultural equipment, it may be useful to treat it as one unit, rather than asking about each individual hoe or sickle.

Ecuador: Small agricultural equipment, i.e. “tools” was treated as one unit.

Ghana: The structure in this module, separating large and small equipment, posed challenges in the analysis because the ownership questions were asked differently in the two sections. While the range of questions may differ across the two sections, any question that is asked in both sections should be worded identically.

Karnataka: Based on the learning from the pilot survey, the questionnaire asked the respondent to identify whether the ownership of each category of small tools (sickle, spade, etc.) was individual or joint but did not attempt to map each tool within a category to an owner or owners. There was little market valuation of used tools, so it was difficult to obtain any value. A separate section on large agricultural equipment such as tractors, tillers and pump-sets was included which asked the detailed individual and joint ownership questions. This segregation of the small tools and large equipment into different sections worked well in Karnataka.

Uganda: Agricultural equipment and consumer durables were included in the same module. In addition, the data was collected in a similar way to that for livestock; the number of items owned by someone within the household was listed, then a list was obtained of everyone in the household who was an owner of at least one of the item. This approach allowed for a calculation of the gender asset gap (the incidence and distribution measures), but did not allow for an analysis using the asset as the unit of analysis.

Consumer Durables: The consumer durables section faced many of the same challenges as the agricultural equipment section. While some surveys may wish to drop some of the items, it would be important to be careful not to drop those items, often of smaller value, which are more likely to be owned by women.

Ecuador: The Ecuador team shortened this module by treating furniture and jewelry each as one unit for purposes of ownership and valuation. Also, if the spouse had not been present for the asset inventory, they were only queried as to the existence and ownership of seven consumer durables, not the full list of over 20 items.

Ghana: The division between large and small durables made data analysis difficult.

Karnataka: Similar to the splitting of sections for the agricultural tools and equipment, it was useful to split the consumer durables as well into two sections. Some items were reported as always owned by all household members in the field testing and the ownership questions on these items were dropped in the final survey.

Businesses: The purpose of the business module was to collect data on business assets. The challenges of this module differed from the others. The first is that the estimated market value of the business may differ from the value of the assets owned by the businesses. Second, it may not be appropriate to assume that the owner of the business is necessarily the owner of all of the business assets.

Finally, the definition of a business may range from a business employing many workers and owning many assets to people who are self-employed and have few or no assets as part of their business. Depending on the definition of a business, the incidence of business ownership will vary. Thus for comparative purposes, it is critical to define businesses consistently. In the *In Her Name* surveys we include the self-employed as business owners.

Many surveys, such as the Living Standards Measurement Study (LSMS) surveys, include a module on only non-agricultural businesses. They assume that the information on agricultural businesses will be captured in the sections on land, livestock and agricultural equipment & installations. However, if the information in these sections is only collected on owned assets, then, for example, information on agricultural enterprises operating on rented land would not be collected.

Ecuador: It is not uncommon for agricultural firms to operate on rented land, such as in the case of flower farms in the highlands. In addition, the team questioned whether the detailed questions on decision-making asked in the individual modules regarding land and livestock were appropriate for capitalist enterprises, for these had been designed with a smallholder economy in mind. In the Ecuadorian context, the business module seemed to be the most appropriate place to ask questions about capitalist agriculture and livestock firms.

In the land module, after asking the amount of land contained in each parcel/farm, the interviewee was asked about the form of land tenure. If the parcel/farm was owned or rented, but operated by five or more wage workers most of the year and/or by a company, the enumerators were instructed to skip to the next section and to record the information for that parcel/farm in the business section.

Unfortunately, the language in the questionnaire for the livestock module was left ambiguous. Respondents were asked “Does anyone in this household own any of the following animals?” In the enumerators manual, nonetheless, it was clarified that if a farm looked like an enterprise (e.g., a poultry or pig farm), the information should be collected in the business module. In the agricultural equipment and installations module, it was clearly specified that this section was applicable only to owner-operated farms and in the manual, enumerators were reminded that if asking about an enterprise, to record the information regarding agricultural equipment & installations in the business module.

This methodology resulted in a greater number of agricultural businesses being reported than would have been the case if the business module was limited to only non-agricultural businesses and relied on the land module alone to identify land ownership and agricultural entrepreneurship.

Karnataka: Small businesses were referred to as economic activities rather than businesses, since in the field test and pilot survey it became clear that many such informal small activities were not considered to be “businesses.” Many of these small business activities were owned by the primary respondents. Although the secondary respondents frequently said that they were joint owners, the secondary respondents often did not know much about the operation of the business. The question about the legal status of the business (sole proprietorship, partnership, etc.) was not appropriate for most of the informal business activities.

Uganda: This module was constructed so that anyone who was involved with a business was asked whether or not he or she owned any assets related to the business. This approach was an attempt not to confound the owner of the business with the owner of business assets. However, only the business assets were valued, not the business itself.

Financial Assets: The financial assets questions were asked only in the individual questionnaire; these were not included in the household inventory. Although full financial information would be useful, there are concerns about asking the primary respondent(s) about savings held by others in the household. While in smaller, nuclear households, it is likely that the vast majority of savings are held by the respondents, this may be less true in more extended households.

The financial assets questions were placed at the end of the asset modules in the individual questionnaire. While this meant that the enumerators were more likely to have gained the confidence of the respondents by this point, it is also likely that some respondents were becoming fatigued.

Gross financial assets can be calculated from the following information in our questionnaires: Formal and informal savings (including stocks, bonds, certificates of deposit) + surrender value of insurance policies (including burial insurance) + loans extended to third parties + surrender value of pensions and other retirement schemes.

While questions were asked about whether respondents had a pension, it is frequently

hard to calculate the value of such assets. When respondents have a pension savings account, they may know the value of it. But if the pension is a guaranteed stream of income at some future point in time, the respondents may not be able to estimate its value. The definitions of pensions also differed across countries, with insurance and pensions being confounded in some places.

Ecuador: It was not uncommon for people to have a checking or savings account with a balance of zero, since many formal sector jobs pay salaries and wages directly into accounts and the moneys may be spent immediately. Thus, it would be best to ask two separate questions: “Do you have a checking or savings account?” (in order to estimate the incidence of formal bank accounts) and “How much money do you usually keep in the account in a usual month as savings?” (to estimate savings). Overall, the Ecuador team would recommend including the financial asset questions in the household inventory rather than the individual questionnaires.

Ghana: The procedure followed is similar to what is being suggested by Ecuador. There was a screening question that asked if the respondent owned any of the following (listed) assets. There was a subsequent question that asked “On average how much was held in the account in the past month?” Because individual accounts are the norm rather than the exception and couples do not tend to reveal their balances to their partners, the Ghana team prefers the present format where the financial asset questions are placed in the individual questionnaire.

Karnataka: Respondents were asked if they had a particular type of account/financial asset, and if yes, what the amount they had in it currently was.

Debt and credit: Ideally, the final estimate of wealth should be net wealth, rather than gross wealth. The issue for survey design is whether to include the amounts owed on individual assets in the asset modules or in a separate debt module. For some items, such as land or housing, the debt is clearly associated with the asset. For other assets, the net value may be less clear since loans may be used for multiple purposes, and the stated intent of the loan may not be its only use.

For measures of net wealth, questions both about money owed to others (debt) and money owed to the respondent by third parties (credit) must be included.

Ecuador: The debt questions were asked in both the asset inventory and the individual questionnaire. However, only in the latter was it explicitly asked in whose name the loan was. The enumerators were not always consistent in reporting loans in the individual questionnaire if they were included in the inventory and thus some information was lost. Also, in the preliminary analysis, it was sometimes difficult to determine whether the spouses were referring to the same loan or to different ones. A major problem is that, unlike every asset owned by someone in the household, debts do not have a unique identifier which allows them to be traced among the different sections of the questionnaire. This was a major error in the design of our questionnaire.

Karnataka: The debts against assets were asked in the asset modules for housing, agricultural land, other real estate and businesses. The instruction to the enumerators was to record any debts other than those already recorded in the asset sections. However, it is not clear from the data that this instruction was followed, and it is likely that there is some double-reporting of the same debts. Checking and cleaning this is very time-consuming; therefore our recommendation would be to ask about all the asset and non-asset related debts of the respondents in one consolidated section rather than in multiple sections.

Other Modules

Other modules were included in the survey to serve three purposes:

- 1) To provide additional details on patterns of asset ownership, accumulation and disposal. These included modules on shocks (to understand if and how assets were utilized to cope with these), on the disposal/dispossession of assets through sale or bequests, conflict over assets and on inheritance.
- 2) To provide information on respondents' knowledge of property rights.
- 3) To provide outcome measures so that the relationship of assets to outcomes could be considered. These included measures on decision-making, violence, consumption and subjective well-being.

The shocks modules included in the surveys were adapted from more general modules about responses to economic shocks. For the purposes of an asset survey, the key questions would be whether the respondent disposed of any assets in response to shocks and to whom these assets belonged.

Conflict over assets revealed relatively little. We would not recommend including this module unless there was a specific reason in a particular context.

A module on marital and inheritance regimes was included that served both purposes 1) and 2) above. This module in particular needed substantial training because the enumerators were unfamiliar with many of the terms and concepts. It asks questions regarding the respondents' understanding of the laws and practices of property with regard to marriage and inheritance.

The marital and inheritance regimes module also asks about any inheritances that a respondent has ever received and about inheritances received by his or her siblings. (The asset modules discussed above only gather information on whether assets currently owned were inherited.) Information on parents' assets at a specified reference point in the past (time of respondents' marriage) was also collected to serve as instrumental variables in understanding individual asset acquisition. While respondents typically knew whether or not their parents had owned any property at that reference point, not all could recall or estimate the extent of land or size of house owned with certainty.

A set of questions on household decision-making were asked in the Ecuador, Ghana and Karnataka surveys. These were designed to allow analysis of how asset ownership is related to the processes of decision-making within households. All respondents were asked whether they were involved in the decisions about their own employment, their spouses' employment, use of the income they earned and that their spouses earned, their own health decisions, and the use of some form of family planning. These specific questions were asked so that comparisons could be derived across countries. What is unique to our module is that for the first two questions (the decision on whether or not to work and how to spend one's income) we have both the respondent's perception of their own decision and of how their spouse makes this decision. This will allow a detailed examination of the degree of agreement among couples on how decisions are made.

In initiating the comparative analyses, it became apparent that the wording of these questions was important. For example, in the surveys that asked, "Who was involved in the decision of whether [person] will work", then if the decision was made that the individual will not work, they may not have answered the question. Instead, the intention was to ask "Who was involved in the decision of whether or not [person] should work" so that the process of either the decision to work or the decision not to work is captured.

Karnataka and Ghana each asked a number of additional decision-making questions regarding expenditures and mobility. The Ecuador team wishes that they had asked more decision-making questions.

Karnataka: The questions about making decisions over expenditures asked about who made the decision the last time the item was bought. It would be better to ask about who normally makes such decisions. In the section on Marital and Inheritance Regimes, respondents were also asked questions about whether their marriage was an 'arranged marriage' or a 'love marriage'.¹¹ It was expected that those women in love marriages would exhibit greater decision-making power, while those who had arranged marriages without their consent being taken would have the least decision-making power. However, the vast majority of respondents said that they had arranged marriages with their consent. We learned in the field that this category was quite diverse – ranging from their permission being taken to just being informed. Therefore, this question was not particularly useful for any analysis.

Recommendations on the Minimum Questions

One of the objectives of the *In Her Name* project was to be able to determine the minimum questions on assets that would have to be asked to generate individual-level asset data in regular household surveys. Here we identify two sets of minimum questions. The first is the minimum questions that should be included in all surveys that ask questions about assets. The second is the minimum set of questions needed to calculate a measure of the gender asset and wealth gaps. The variations with the Uganda survey helped to identify the data needs for the various calculations.

Minimum Questions for All Surveys

All household surveys should include questions about the ownership of the residence and about land holdings. Any surveys that ask questions about additional assets should always ask respondents to identify the owners. Options should be available for the respondent to list multiple owners. If a question is asked about a

title or ownership document, it should always be followed with the question asking who are those listed as owners on the documents.

These very minimal additional questions will provide substantial additional information about patterns of asset ownership. It will allow for at least minimal comparisons across countries and across time. And it will make it possible to calculate gender asset and wealth gap measures for housing and land.

Gender Gap Measures

The gender asset gap is demonstrated by comparing the incidence of asset ownership for men and for women. For each type of asset, the number of women (age 18 and older) who are owners of that specific type of asset is divided by the total number of adult women; the same procedure is followed for men.

To calculate the gender asset gap, data is needed on each adult in the sampled households on whether or not they own a particular type of asset. In the surveys discussed here, this information was obtained in the asset inventory which asks respondents to list all assets and their owners.

The gender wealth gap is demonstrated by the share of wealth owned by women. It may be calculated by type of asset, such as the gender wealth gap in land or housing. Or it may be calculated as a total for all physical and financial assets. Data is needed on the value of each asset and the owner.

For a complete measure of the gender asset and wealth gaps, data is needed on all assets. However, for many purposes, a sub-sample of assets may provide information on the gendered patterns of asset ownership. Appendix 2 provides the listing and recommended wording for questions to calculate the gender asset and wealth gaps.

If the entire range of assets is not going to be enumerated, then decisions about which assets to include must be made. In urban areas, the most valuable asset is usually the residence. In rural areas, it is the residence and agricultural land. Thus, at a minimum, questions on individual ownership should include the residence and land.

Patterns of ownership also vary by wealth quintile. Our surveys reveal that the poorest households typically have the majority of their wealth in consumer durables, rather than in real estate. Thus, to distinguish the poorer households from the wealthier ones, some information on consumer durables is useful.

Financial assets generally represent an increasing share of wealth as the level of the Gross Domestic Product (GDP) per capita increases; thus it would be useful to track the share of women's wealth in financial assets over time.

Other key assets include other real estate, businesses, and major livestock.

Incidence measures on specific assets may also be useful for comparing across countries and across time. For example, our surveys found a cell phone gap in favor of men in all four countries. As the technology becomes even more widespread, it will be important to monitor the gender gap in cell phone ownership.

General Implementation Issues

Many of the issues related to implementing these surveys are common to all large sample surveys. In this section, we highlight the lessons that are specific to surveys focused on collecting individual level asset data. Below we discuss training enumerators, implementing the survey, gaining access to communities and households, interviewing protocols, and data cleaning and analysis.

Training

All surveys require extensive training of the enumerators. In this section, we focus on the training issues that were unique to doing an individual level asset survey.

These surveys faced issues of both training and retraining the enumerators. Retraining meant changing the patterns and understandings that they had developed with their involvement in other household surveys, for example, the assumption that the reference person should always be the household head (and usually male).

All of the teams underestimated the amount of time needed to train the enumerators.

Specific aspects of the surveys that needed special attention during the training were the skip patterns (whereby the enumerators would skip questions that were not relevant, such as when a particular asset was not owned), the instructions for verifying assets listed by the primary respondent in the asset inventory with

the secondary respondent, and the coding with respect to the reference person or reference primary respondent. All these three issues were fairly complicated; however, the last issue was particularly difficult for even the most skilled enumerators because most surveys assume that the reference person should always be the household head (and usually male).

Another issue for training was to make sure that assets were not double counted such as in the case of consumer durables and business assets. The business module asked the respondent to list each asset that was part of the business (i.e., land, real estate, equipment, and large consumer durables). In Karnataka and Ghana, the interviewers were asked to verify with the respondents that the assets listed here had not been previously listed in another module; this required attention on the part of the enumerators. In Ecuador, Ghana and Karnataka, in the consumer durables sections, the respondent was asked whether the item was used in a business or activity, and if so, to list that activity ID from the businesses section.

Training included going through the questionnaires question by question with the enumerators. The trainers also demonstrated how to conduct the interviews and had the enumerators conduct mock interviews under different scenarios.

Enumerators also required training regarding a number of different concepts, including:

- Different types of marital and consensual unions
- Definitions of different types of assets
- Meanings of the term “ownership”
- Various types of property ownership documents
- Differences between collateral and pawning
- Legal frameworks of marital and inheritance regimes
- Gender sensitization

In Ecuador, Karnataka and Uganda, the enumerators felt that the survey was extremely complex. However, in Ghana, the enumerators had been involved in household surveys that were much longer and thus thought this one was relatively easy, although they did have difficulty with the coding issues.

Ecuador: Since the survey instrument was different from many questionnaires that the survey agency had worked with in the past, it was critical for the project team to work closely with the survey agency throughout the training. In retrospect, the team wishes it had led more of the training itself, rather than relied on the survey agency to do this.

Ghana: Training involved going through the questionnaire in English and then running mock interview sessions in the seven major languages. A pilot survey was conducted, and the results were used in the post-pilot training. This process helped to illustrate clearly the importance of being careful with codes. The enumerators found keeping track of the IDs and various codes a challenge. We went through a hands-on session where based on a scenario in a household the enumerators filled in the relevant IDs, codes for other relatives, and asset codes. It was a hands-on session because the questionnaire was displayed on a large screen and the relevant codes filled in. To further ensure that the enumerators were comfortable with using the codes, the first week of the main survey concentrated on collecting data in locations within a couple of hours’ drive from Accra. This made it possible for the Ghana team to supervise the data collection and address any remaining problems before the enumerators went further afield.

Karnataka: A full three week training program was done first, followed by a 100 household pilot survey with the full set of enumerators. During the training and pilot testing, the questionnaires, field manuals, protocols and instructions went through a lot of changes and none of these were finalized until the very last minute. While some of the enumerators kept pace with this dynamic process, not all were able to do so. This led to confusion which could have been avoided. A better way to do this might be to have a smaller field team comprised of the best enumerators trained intensively for a few days and to undertake the pilot with them. Then, the questionnaires would get fine-tuned and refined without the entire field team having to be cognizant about these processes. Then when the questionnaires are nearly final, the formal training could begin for the enumerators, giving adequate time for demonstrations, mock interviews, and field practice before launching the actual survey.

Implementation

The experiences of implementing the survey differed widely, based, in part, on the different previous experiences of the implementing organizations.

The questionnaires should be pretested extensively before beginning the pilot stage. Because many of the questions had never been asked before in these contexts, it was important to pretest the questionnaires among different groups of people.

Pilot testing of the instrument was critical. The *In Her Name* projects were on a very tight schedule which made refining the instrument difficult after the pilot had been completed. The agencies had been hired and were ready to begin the fieldwork and did not want to wait while the instrument was tested and retested.

Translation of the instrument is quite time-consuming. The Ecuador survey was implemented in Spanish and the Karnataka survey in Kannada. In Ghana and Uganda, the instrument was implemented in English because of the existence of multiple local languages. The enumerators translated the questions themselves when necessary and sometimes worked with an interpreter. If the enumerators are doing some of the translating/interpreting themselves, it is especially critical that they understand the concepts of ownership and owner and are comfortable translating these.

The project teams worked closely with the survey agencies (and relied on their experience) throughout the implementation process.

Ecuador: Overall, the Ecuador team had a relatively good experience with their survey agency. Both parties severely underestimated the budget for implementing a survey of this size and a questionnaire of this complexity. Training ended up being much longer than their usual practice, and the high rejection rate among upper income households also increased costs.

Karnataka: The attrition of the enumerators was very high, especially in the initial phase of the survey. The team attributes this to three factors. First, the survey was relatively complex. Second, the survey was implemented first in the coastal district. In this district, the population is widely dispersed with villages often spread out over 8-10 kilometers. Thus, identifying the households and visiting and revisiting them took considerable effort. The enumerators became quickly exhausted. Finally, the survey agency had some poor human resource management practices.

One key lesson is to begin implementation in a high population density area, where the logistics are relatively easy. This allows enumerators to become confident about the survey before moving to areas where there logistics are more difficult.

In addition, it is important to have discussions with the survey agency in advance about key personnel issues, such as payment of the field personnel on time, weekly leave, in-field transportation costs. All of these issues will have an impact on their motivation in the field and, therefore, the data quality.

The surveys were long. Telling people the number of questions and the likely time it would take to go through them before beginning the questions facilitated cooperation and was more likely to ensure privacy throughout the interview. In general, the interviews took about one and a half to two hours for the inventory and individual questionnaire; some interviews took more than four hours. The time varied based on the number of assets that the household owned; households with many assets obviously required more time. In Ghana and Karnataka, with two enumerators interviewing the respondents at the same time, the total time in the household was less than in Ecuador and Uganda where one enumerator interviewed both respondents.

Both enumerators and respondents experienced fatigue. When enumerators saw that the respondents were getting tired, some had a tendency to speed up the interview which increased the likelihood of enumerator mistakes. Splitting up the interview into two sittings may have reduced exhaustion; however, this would have increased costs and people may not be willing or available for a second sitting. If during the course of the interview, the respondent requested postponement of the remainder of the interview to a second sitting, the enumerator did break the interview into two sittings.

Gaining Access to Communities and Households

Many of the issues that we faced in gaining access to communities and households were similar to those faced by any household survey. We were especially concerned about issues that might bias our results about asset ownership. The more affluent households in Ecuador and Karnataka were the most reluctant to agree to be interviewed. The teams were unable to access gated communities, where wealthier residents live. Generally, urban households were less willing to answer surveys than rural households and affluent households were less likely than lower income ones. This experience was consistent with that of other household surveys.

Interviewing Protocols

Various interviewing protocols were used by the different teams. The project teams are currently analyzing the data to determine if there are statistically significant differences in the responses based on the different protocols.

One key issue is whether or not there were two enumerators per household. If it is culturally necessary for women to be interviewed by women and men to be interviewed by men, then two enumerators are needed.

Having two enumerators per household meant that both could record the household asset inventory and then refer to it during the individual interviews. Otherwise, the enumerators had to subsequently copy the information from the inventory to the individual questionnaires.

Ecuador: There was one enumerator per household. Thus, they had to copy much of the household inventory information to the individual questionnaire, which took time and potentially introduced errors. Although the plan had been to pair enumerators and respondents by sex whenever possible, the survey company did not understand this and did not budget for it. Although initially about half of the enumerators were female, the attrition rate was higher for them.

Ghana: The Ghana team worked in pairs of a male and a female enumerator. If both enumerators were present during the household inventory, then both recorded the answers in the appropriate booklet.

Karnataka: The team worked in pairs with a male and a female enumerator. Both had to be present for the asset inventory and recorded the answers to it in the appropriate booklet. Thus, each enumerator had access to this information during the individual interview. If the secondary respondent was present during the discussion of the household inventory, the enumerator copied over the asset ownership information and verified the responses with the respondent during the individual interview; if the respondent was not present, the enumerator asked the respondent the ownership question afresh.

Uganda: There was one enumerator per household. The Uganda team suspected that having the same enumerator interviewing up to four people in the household meant that it was unlikely that anyone would reveal assets that were hidden from others in the household.

A second issue was whether it was preferable to interview the principal couple or the two respondents together for the household inventory. Regardless of who was present at the inventory, it was considered critical to have privacy for the individual interviews.

Ecuador: The protocol was to have both members of the couple together for the household inventory whenever possible. It was expected that they would discuss and eventually agree on an answer. The enumerators noted who was present for each portion of the household inventory. Occasionally one person left during the interview and the other one completed it.

Ghana: The household asset inventory was sometimes completed by both the primary and secondary respondent.

Karnataka: The household inventory may have involved more than just the primary respondent. The enumerators were instructed to record if the secondary respondent was present. For the individual interviews, the enumerators were instructed to leave if they could not negotiate privacy.

Data Cleaning and Analysis

It is useful to have a data analyst on the project teams to structure the questions and resulting database so that the responses could be easily coded and analyzed. Although one of the objectives of the pilot survey was to produce a template for the final data base, there was insufficient time between the pilot and the initiation of the survey to dedicate much time to analyzing the structure of the data base. Priority was given to finalizing the survey instrument.

Different procedures were followed in each of the countries regarding data entry. Karnataka and Ghana used double-entry data processing. In Ecuador, the questionnaires were optically scanned.

Ecuador: The team had a very disappointing experience with optical scanning software. Although we had been assured that this method produced less than 1% error, that 1% is often too much, resulting in responses that make no sense. The team has spent 18 months cleaning the data, section by section, checking many entries against the original questionnaires.

Ghana: The data entry person provided some useful comments based on the pilot questionnaire. For example, he recommended the use of screening questions. Almost every section in the questionnaire had a screening question such as “Does anyone in this household own any of the following consumer durables?”

Karnataka: The team had an excellent data analyst from the beginning; however, it needed more time for the data entry package to be developed. Changes to the questionnaire were very dynamic and these were communicated in real time to the survey data entry person which led to a lot of confusion. Also, the survey data entry person did not attend the training; the team concluded that they should have insisted that he do so.

Conclusion

These surveys have demonstrated that it is feasible to collect individual level asset data. This guide has provided information on which questions worked the best to collect this data in four very different countries.

A key issue in designing a household asset survey is whether more than one individual should be interviewed per household to get estimates of asset ownership at the individual level. In future work we will be reporting our findings on what was gained by interviewing a second person on asset ownership with respect to: 1) level of disagreement on whether someone in the household owned the asset; 2) level of disagreement on who owned the asset; 3) level of disagreement over the valuation of the asset; and 4) the degree to which additional assets were uncovered during the second interview.

It can be complex to integrate the data from the household asset inventory and the individual questionnaires for analysis. It has taken the Ecuador team, for example, four months to reconcile and analyze the two questionnaires with respect to the data on the principal residence, agricultural lands, other real estate, and businesses. While it will be interesting methodologically to have undertaken this analysis, we are not convinced that it is worth the effort.

One thing that becomes apparent is that there is not a single right way to collect this data. Even working as a single team across the various countries, we had disagreements as to the best way to ask the questions. In part, this is because the contexts differ so widely. What one of us takes for granted as being the best approach in one context, seems nonsensical in another context. The background and qualitative work on the context and understandings of ownership is critical. In many instances in this guide, we raise issues that should be considered in the field testing and implementation of individual asset surveys.

Notes

1. The template was designed in conjunction with a review of survey instruments that incorporated individual level asset questions by Doss, Grown, and Deere (2008).
2. In Ecuador, Ghana, and Karnataka, at most two individuals in a household were interviewed. In Uganda, up to four members of a household were interviewed.
3. More details are available in each of the country reports: Deere and Contreras (2011), Oduro, Baah-Boateng, and Boakye-Yiadom (2011); and Swaminathan, Suchitra, and Lahoti (2011).
4. The original sample size contemplated was 3,000 households. As is typical in large-scale living standard surveys (Davies et al. 2008), we faced an extremely high rejection rate among the highest socio-economic group and the sample is thus truncated, not being representative of the wealthiest households. The final sample of 2,892 households has a survey margin error of 1.8 percent nationally, 2.2 percent for urban areas and 3.2 percent for rural areas. See Deere and Contreras (2011) for further details.
5. The Amazon region and the Galapagos Islands, which hold less than 5 percent of households nationally, were excluded from the sample due to budget constraints.
6. Adults were defined as 18 years of age and older.
7. Bangalore was renamed Bengaluru in 2006.
8. Bengaluru was the only metropolitan city in Karnataka as per the 2001 Census.
9. Field work in Ecuador revealed that asking both members of a couple together resulted in more precise answers to the valuation questions, since men and women tended to have access to different information. The couple was given the opportunity to discuss their reply before settling on a final estimate.
10. *Mailo* is a land tenure system specific to Uganda; many of those farming on the land are tenants, with specific legal rights.
11. Arranged marriages in India are those where the decisions about the timing of an individual's marriage and the selection of the spouse are initiated and largely undertaken by the parents and extended family of the individual. The individual's consent to both these decisions may or may not be taken. What in common parlance is known as a love marriage, by contrast, is one where individuals typically choose their own spouses.

APPENDIX 1. Description of Samples

Table 1. Distribution of the Sample by Type of Interview, Ecuador

Type of interview	Household questionnaire		Individual questionnaire			
	Households	%	Men	Women	Total	%
Households with a principal couple	1,980	69	1,821	1,935	3,756	81
Couple interviewed together	995	35	989	986	1,975	42
Couple interviewed separately	796	28	796	796	1,592	34
One member absent	189	7	36	153	189	4
Households without a principal couple	912	32	193	719	912	20
Male head	193	7	193	0	193	4
Female head	719	25	0	719	719	15
Total	2,892	100	2,014	2,654	4,668	100

Table 2. Distribution of the Sample by Type of Interview, Ghana

Type of interview	Household questionnaire		Individual questionnaire			
	No. of households	%	Men	Women	Total no. of individuals	%
Principal couple respondent households	943	44	943	943	1,886	58
Secondary respondent present for all asset listing sections	785	36	785	785	1,570	48
Other dual respondent households	166	8	117	215	332	10
Secondary respondent present for all asset listing sections	121	6	84	158	242	7
Single respondent households	1,061	49	432	629	1,061	32
Total	2,170	100	1,492	1,787	3,279	100

Table 3. Distribution of the Sample by Type of Interview, Karnataka

Type of interview	Asset listing		
	Male primary	Female primary	Total
Principal couple respondent households	2,547 (95%)	124 (5%)	2,671
% where secondary respondent present for all asset listing sections	54	44	
% where secondary respondent not present for all asset listing sections	46	56	
Other dual respondent households	158 (37%)	268 (73%)	426
% where secondary respondent present for all asset listing sections	41	46	
% where secondary respondent not present for all asset listing sections	59	54	
Single respondent households	42	58	991

Table 4. Distribution of Individual Questionnaires by Sex and Country

Country	Male	Female
Ecuador	43.1	56.9
Ghana	45.5	54.5
Karnataka	44.3	55.7
Uganda	45.1	54.9

APPENDIX 2. Minimum Questions for Calculating Gender Asset and Wealth Gaps

The gender asset and gross wealth gaps of the dwelling, agricultural land, and other real estate can be estimated by including a minimum of five questions in a household survey for the dwelling, each plot, and each piece of real estate. Of these five questions, three are frequently asked in household surveys. The additional two are to identify the owners.

Dwelling

- What is the present ownership status of this dwelling? (owned, rented....)
- Who are the owners of this dwelling? (with space for multiple owners to be listed)
- Is there an ownership document? (list types of documents)
 - If yes, whose names are listed as owners on the document? (with space for multiple names to be listed.)
- If you were to sell the dwelling today, how much would you receive?

Agricultural Land

- Does any member of the household own any agricultural land?

For each plot of land:

- Who owns the plot? (with space for multiple owners to be listed)
- Is there an ownership document for the plot? (list types of documents)
 - If yes, whose names are listed as owners on the document? (with space for multiple owners to be listed.)
- If the land was sold today, how much would you receive?

Other Real Estate

- Does any member of the household currently own any other building, dwelling, or plot of land of non-agricultural land?

For each building, dwelling, or plot of land of non-agricultural land owned:

- To whom does this real estate belong? (with space for multiple owners to be listed)
- Is there an ownership document for this piece of real estate? (list types of documents)
 - If yes, whose names are listed as owners on the document? (with space for multiple owners to be listed.)
- If you were to sell the real estate today, how much would you receive?

The gender asset and wealth gaps of large agricultural equipment (such as tractors), consumer durables (such as vehicles and cell phones) can be estimated using similar questions. In some contexts it may be useful to gather additional information about the ownership of the asset. For instance, in Ghana asking about the tenure of the plot may allow for more accurate estimates of the value of agricultural land.

Estimating the gender asset and wealth gaps of non-agricultural businesses and major livestock is slightly more complicated. Beginning with livestock, as discussed above, the *In Her Name* survey modules collected detailed information on each type of animal owned. The questions asked how many animals of each type were owned by a household member, how many were owned jointly or individually, by whom, and the animals' market values.

A simpler approach that would still get the information needed to estimate the gender asset and wealth gaps would be to ask the primary respondent first to list the number of animals that each individual in the household owns individually and that he or she owns jointly. An approximate valuation measure could be constructed by asking for the value of all of the animals of a particular type (cows, sheep, goats, etc.) and then apportioning it among the various owners.

Livestock

- Does [household member] own any [type of livestock]?

If [household member] owns [type of livestock]:

- How many [type of livestock] does [household member] own individually?
- How many [type of livestock] does [household member] own jointly?
- If all of the [type of livestock] were sold today, how much would you receive?

To calculate the incidence gaps – the proportion of women who own animals and the proportion of men who own animals, but not the gender wealth gaps:

- How many [type of animals] are owned by anyone in the household?
- List everyone in the household who is an owner of [type of animal].

Businesses

For non-agricultural businesses, additional questions are needed about the business to be able to calculate the gender wealth gap and so as to not double count assets used in a business but reported in another module.

- Does any member of the household currently own or operate any businesses including self-employment activities?

For each business:

- Who owns this business? (with space for multiple owners to be listed)
- Is this business a sole proprietorship, partnership, limited liability company, or other?
- What is the value of this business if it were to be sold today?
- If the business were to be sold today, how much would each of the owners listed above receive?
- Does this business own any land?
- Was this land reported earlier?
- If the business owns land that has not been reported, what is the value of the land if it were to be sold today?
- Does this business own any buildings and other non-agricultural land?
- If the business owns any buildings and other non-agricultural land, what is the value of the building and other non-agricultural land if it were to be sold today?
- Was this building or non-agricultural land reported earlier?

Financial Assets

The above questions can all be asked in the inventory. Questions about financial assets and of some more sensitive physical assets such as jewelry could also be asked in the inventory. However, depending on the context, asking individual members about their asset ownership will likely provide more accurate estimates of the gender asset and gross wealth measures than would inventory questions.

The gender asset and gross wealth gaps of financial assets (formal and informal savings, stocks, bonds, certificates of deposit, and insurance policies, loans to third parties) can be estimated by including a minimum of two questions for each financial asset:

- Do you have a [type of financial account]?
- How much money do you keep in the account in a usual month as savings?

Jewelry

The gender asset and gross wealth gaps of jewelry can be estimated by including a minimum of two questions for jewelry:

- Do you own any jewelry?
- If you were to sell all of your jewelry today, how much would you receive?

Net Wealth Gaps

For each type of asset two additional questions can be asked to be able to estimate the net worth of the asset:

- Is there an outstanding loan on the [asset]?
 - If yes, how much is the loan?

References

- Davies, James B., Susanna Sandstrom, Anthony Shorrocks, and Edward N. Wolff. 2008. The World Distribution of Household Wealth. In James B. Davies, ed., *Personal Wealth from a Global Perspective*, (pp. 395-418). New York: Oxford University Press.
- Deere, Carmen Diana and Jackeline Contreras. 2011. *Acumulación de Activos: Una apuesta por la equidad*. Quito: FLACSO-Ecuador.
- Doss, Cheryl R., Caren Grown and Carmen Diana Deere. 2008. *Gender and Asset Ownership: A Guide to Collecting Individual Level Data*. Policy Research Working Paper 4704. Washington, DC: World Bank.
- Oduro, A. D., W. Baah Baah-Boateng and L. Boakye-Yiadom. 2011. *Measuring the Gender Asset Gap in Ghana*. Accra: Woeli Publishing House and University of Ghana.
- Swaminathan, Hema, Suchitra, J. Y. and Rahul Lahoti. 2011. *KHAS: Measuring the Gender Asset Gap*. Bangalore: Indian Institute of Management Bangalore.





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