

As more African countries are recognizing the need for land reform and strengthened land information systems for recognition and governance of formalized land rights, gender relations constitute a non-ignorable dimension of the process. Despite this recognition, the levels of formal land ownership continue to be low across the region. With weak land information systems, limited avenues for objective identity verification and complex intra-household bargaining dynamics, even the presence of a legal document does not always guarantee the proper recognition of one's ownership claim. To properly measure advances in securing and protecting land rights from a gender perspective, several dimensions of ownership, bundle of rights and their inter-relationships must be monitored at the micro-level. While collecting detailed individual-disaggregated information as part of household surveys on reported, economic and legal ownership of land as well as specific rights held by individuals may help accomplish this objective, the analytical implications of the approach to *respondent selection* are not fully known by survey practitioners and analysts alike. A simplistic approach to data collection featuring a single respondent, who would typically be the self-identified most knowledgeable household member in the context of multi-topic household surveys, may miss the reality on the ground regarding the gender dimensions of ownership of and rights to land, and therefore render the measurement of progress in this area difficult.

This paper contributes to a body of work on the relative empirical and cost implications of different approaches to respondent selection in the context of household surveys focused on individual level asset ownership and control. In particular, it builds on results from a randomized household survey experiment implemented in Uganda formally known as the methodological experiment on measuring asset ownership from a gender perspective (MEXA). This experiment provided a unique opportunity for more in-depth analysis of gender disparities in asset ownership, with a focus on land targeting 140 enumeration areas (EAs) across Uganda and randomly allocated 4 households in each EA to each of 5 treatments that differed in terms of respondent selection. Regardless of the treatment, the respondent(s) were interviewed alone. The first four treatments included interviewing: 1. The self-identified most knowledgeable household member, 2. A randomly selected member of the principal couple, 3. The principal couple together, 4. All adult household members, simultaneously. In Arms 1-4, the respondents reported on all assets owned, either exclusively or jointly, by members of the household. Arm 5 was identical to Arm 4, except that respondents reported only on assets they themselves owned, either exclusively or jointly. The asset types included: dwelling, agricultural land, livestock, agricultural equipment, other real estate, non-farm enterprises/enterprise assets, financial assets and liabilities, and valuables. Differentiation across legal, reported, and economic ownership and the bundle of rights (sell, rent out, use as collateral, bequeath, and make investments) at the asset level was key. Individuals associated with each of these constructs were uniquely identified.

The recommendations from MEXA on improving the availability and the quality of intra-household information on individual ownership of and rights to assets have already informed the design the Malawi Fourth Integrated Household Survey (IHS4) 2016/17, which is being implemented by the Malawi National Statistical Office from March 2016 to March 2017. The IHS4 is interviewing 12,480 cross-sectional households across 780 EAs, and in parallel, revisiting a national sub-sample of 2,300 households that had been previously interviewed in 2010 and 2013 as part of the Integrated Household Panel Survey (IHPS). The IHS4 cross-sectional and panel components administer a multi-topic Household Questionnaire, and if applicable, Agriculture and Fishery Questionnaires, in each sampled household. As part of the panel component specifically, the IHS4 aims to administer up to 4 adult individual interviews per household. If a sampled household has more than 4 adult household members, following the preference given to the head of the household, and his/her spouse if applicable, the remaining interview targets (2 or 3 depending on the presence of a spouse) will be selected at random from the remaining pool of adult household members. The individual interviews administer augmented and contextualized versions of selected **Arm 5** MEXA questionnaire modules including dwelling, agricultural land, and financial accounts, loans and liabilities and the existing IHS4 questionnaire modules on education, health, employment and food insecurity. Further, in case of an agricultural household that is reporting to own and/or cultivate land in the reference rainy season, the household inventory of agricultural parcels that is created as part of the IHS4 Agriculture Questionnaire is fed into each individual interview conducted in that panel household. The IHS4 cross-sectional Agriculture Questionnaire also collects parcel-level data on reported, economic and documented ownership, and rights to sell and bequeath but following self-identified most knowledgeable member approach, per usual practice in Malawi. Individual interviews are administered (simultaneously and with gender match-up between the enumerator and respondent) following the administration of the Household, Agriculture and Fishery Questionnaires.

The questionnaire additionally collects information on essential attributes of each asset, probes for the way in which the asset was acquired and identifies the individuals from whom the asset was inherited or received as a gift, as applicable. On valuation, the respondents are asked to provide the current hypothetical sales value for each asset (and the construction costs specifically for the dwelling) and limited information on their knowledge of asset transactions in their communities.

The parallel implementation of the IHS4 cross-sectional and panel components offer another opportunity to assess potential Arm 5 effects, vis-à-vis Arm 1, on the agricultural land-related outcome variables. Within Arm 5 specifically, the IHS4 data allows for the comparison of respondent and proxy respondent reporting regarding respondent ownership of and rights to agricultural land, but this time at the asset-level. It also

allows for the inclusion of perceived differences in tenure security within the analysis through a household-level module administered to both the cross-sectional and panel households on recent disputes and the likelihood of disputes in the next 5 to 10 years for all residential and agricultural gardens.