Section 2. Collecting Sex-Disaggregated Data on Asset Ownership: Evidence from Pilot Surveys

Introduction

The Beijing Platform for Action 1995, heralded as one of the most progressive frameworks for advocating gender equality, is more than 2 decades old. Since its inception, tremendous progress has been made in achieving gender equality globally, but significant gaps continue to exist. Bridging the inequalities with respect to women's access to productive resources is still a challenge in many parts of the world.

While the need to promote greater gender equality is recognized and addressed in both the Millennium Development Goals and Sustainable Development Goals (SDGs), the SDGs take on the issue by explicitly linking gender equality in economic resources to the sustainable development agenda. In particular, the importance of ensuring women's equal rights to economic resources, ownership, and control over land and other forms of property is mentioned under SDG targets 1.4, 2.3, and 5.a (Box 7.1).

The importance of asset ownership and wealth for individual and household welfare has been documented in recent decades. There is a greater appreciation for the complex interlinkages between asset ownership, sustainable livelihoods, and the ability to transition and stay out of poverty, with implications for current and intergenerational household well-being. Often, it is the ownership of certain kinds of assets (a house or land, for example) that determines if households are structurally poor (in poverty over a longer period) or have temporarily slipped into poverty due to a negative income shock. Assets can aid income diversification and can be used to access credit by serving as collateral.

The ability of women to own and control assets is critical for securing gender equity and delivering on the sustainable development agenda. Empirical evidence from the intrahousehold

allocation literature resource across diverse contexts suggests that women's asset ownership is associated with better nutrition and education for their children (Quisumbing and Maluccio 2000, Doss 2006); increased bargaining power within the household as evinced by greater participation in household decision making and increased mobility (Garikipati 2009, Twyman et al. 2015, Swaminathan et al. 2011); and protection against the experience of domestic violence (Panda and Agarwal 2007, Oduro et al., 2016, Bonilla et al. 2017). Research from Sub-Saharan Africa suggests that strengthening women's land rights and tenure security has implications for agricultural productivity and soil conservation practices (Goldstein and Udry 2008; Ali, Deininger, and Goldstein 2014).

Despite this body of strong evidence linking women's asset ownership and development goals, such sex-disaggregated data needed for monitoring of the progress on relevant targets in the 2030 Agenda is scarce. Conventional surveys, including those conducted by national statistical agencies, use the household as the unit of data collection. Information is obtained on household asset ownership (land, dwelling, and so on) from a household member, usually the head of the household; but this information is of rather limited use as individuals own assets, not households. Any gender analysis (or for that matter, any analysis based on individual characteristics) gets limited to comparisons between households headed by males and households headed by females, categorized based on the sex of the household head. This approach does not shed any light on men in households headed by women or women in households headed by men. Data from Latin America and Caribbean show that for certain categories of assets, gender inequality is overestimated by headship analysis as it ignores women in maleheaded households (Deere, Alvarado, and Twyman 2012). Similarly, Peterman et al. (2011) found in

Uganda that using the sex of the household head as a gender indicator underestimates the differences in agricultural productivity between male-owned and female-owned plots.

Sex-disaggregated asset data can also highlight the gendered experience of poverty, which is not captured using household-level data. A study on multidimensional poverty from Karnataka, India finds that gender differentials in poverty are significant based on individual poverty lines (a difference of 34 percentage points between male and female poverty rates), but are almost nonexistent when assigned the household poverty line (1 percentage point difference) (Vijaya, Lahoti, Swaminathan 2014). Among other attributes, individual-level asset ownership data was used to construct individual poverty scores. The study also finds that the poverty of poor women in nonpoor households was driven largely by lack of education and lack of asset ownership, even when the household was classified as an asset holder.

Recent numerous initiatives have embarked on collecting individual-level asset data. However, the data collection protocols including the questionnaire design, methodology, and sampling procedure, are not standardized across these initiatives, rendering cross-data comparisons difficult. Hence, despite these initiatives, there is still a lot of ground to cover in terms of providing methodological guidelines and building capacity of national statistical agencies for basic data collection.

The Evidence and Data for Gender Equality (EDGE) project is an attempt to systematically address the data and methodological lacuna in the domain of sex-disaggregated data. EDGE is a global initiative that seeks to accelerate the production of internationally comparable sex-disaggregated data on health, education, asset ownership, employment, and entrepreneurship through two related activities: creation of an online gender data portal to share existing data on education, health, and employment;

and development of methodological guidelines for collecting sex-disaggregated asset ownership and entrepreneurship data.

The second objective of the EDGE initiative was achieved through a multistakeholder approach involving national statistical agencies, researchers with relevant expertise, and regional and international agencies: United Nations Statistics Division, UN Women, Asian Development Bank (ADB), Food and Agriculture Organization of the United Nations, Organisation for Economic Co-operation and Development, and the World Bank. The methodology developed under the EDGE initiative was piloted in seven countries: Georgia, Maldives, Mexico, Mongolia, the Philippines, South Africa, and Uganda, and the experience gained from the conduct of pilot household surveys is being used by the UN Statistics Division to develop methodological guidelines on the collection of data on asset ownership and control from a gender perspective.

ADB provided technical and financial support for the implementation of the household Pilot Surveys on Measuring Asset Ownership and Entrepreneurship from a Gender Perspective in Georgia, Mongolia, and the Philippines using methodology developed under the EDGE initiative and adapted to the country context.⁶ The project partners are the National Statistics Office of Georgia (GeoStat), National Statistics Office of Mongolia, Philippine Statistics Authority, and UN Statistics Division.

This section summarizes some of the preliminary findings and valuable lessons from the pilot surveys conducted by ADB and collaborating national statistical agencies.⁷

ADB. 2012. Statistical Capacity Development for Social Inclusion and Gender Equality. Manila (R-CDTA 8243).

Detailed final results of the initiative will be disseminated in a forthcoming publication. Survey questionnaires are available online and can be accessed through https://unstats.un.org/edge/

Box 7.1: SDGs and Women's Rights to Ownership and Control of Economic Resources

In September 2015, the General Assembly of the United Nations adopted the 2030 Agenda for Sustainable Development to end poverty, protect the planet, and ensure prosperity for all by building upon the achievements of the Millennium Development Goals. The 2030 Agenda comprises 17 Sustainable Development Goals and 169 targets. The 2030 Agenda recognizes that empowerment of women and girls through gender equality in ownership and control of economic resources among other measures is critical to achieving the vision set out in the 2030 Agenda. Explicit targets relating of economic ownership of assets in the SDGs are as follows:

SDG Target 1.4: By 2030, ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services, including microfinance.

SDG 2 Target 2.3: By 2030, double the agricultural productivity and the incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition, and non-farm employment.

On the other hand, SDG 5 (achieve gender equality and empower women and girls) recognizes gender equality as an intrinsic human right, and target 5.a notes that countries should "undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws." Asset ownership and control by women and their security of tenure is central to the indicators for monitoring progress in target 5.a:

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

SDG Indicator 5.a.2: Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control.

Asset Ownership and Control: A Gender Perspective

Figure 7.1 presents the EDGE conceptual framework for measuring asset ownership and control from a gender perspective, which guided the implementation of the pilot surveys. The framework maps out the different domains of information needed to be collected through the survey so that it can facilitate a comprehensive gender analysis of asset ownership and control.

What sets this framework apart is that the notion of asset ownership is deconstructed so there is a clear recognition that assets are held by individual household members and not by a notional household unit. This framework forces us to think about the ways in which gender intersects with how assets are acquired, what ownership means, and how these assets are used.

The left panel of Figure 7.1 suggests that any exploration of the gendered ownership of assets must be located within the specific country context with respect to social norms, inheritance laws, and marital regimes as these determine how men and women acquire assets. Social norms that delineate roles and responsibilities between men and women are important contextual factors that can affect the implementation of such laws as well as the effective use of and control over assets by women. Furthermore, countries with pluralistic legal regimes determine acquisition of assets and offer a diverse meaning of ownership across customary and statutory law.

The center panel of the EDGE framework illustrated in Figure 7.1 implies that ownership can be conceptualized as a bundle of rights that can vary according to the context and type of asset. The most frequently collected information from household surveys is **reported ownership** and is based on the

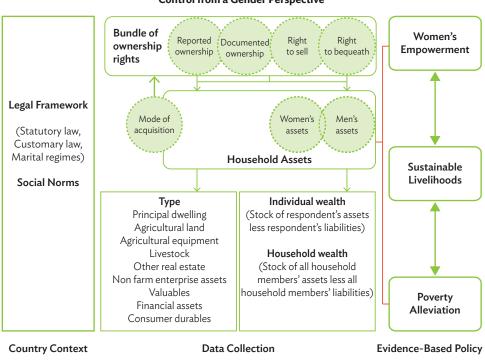


Figure 7.1: Conceptual Framework for Measuring Asset Ownership and Control from a Gender Perspective

Source: United Nations. 2017. United Nations Methodological Guidelines on the Production of Statistics on Asset Ownership from a Gender Perspective. Draft presented to the Statistical Commission in its 48th Session, 7–10 March 2017.

respondent's assessment of who owns an asset. If individuals are asked only about the assets they own, then reported ownership reflects their self-perception of being owners or not. Reported ownership data can also be collected via proxy reporting (for example, when the head or most knowledgeable member of the household identifies all owners of a house or parcel of land). Both approaches are interesting from a bargaining power perspective, as a woman's bargaining power and empowerment may depend on whether she considers herself an owner of an asset and how she is perceived by other household members.

Documented ownership, on the other hand, is a more formalized concept where individuals can claim legal right over an asset by having their name listed on an ownership document. Examples of such documents include formal title deed, purchase agreement, and property tax records. The documentation requirements can vary across

countries and sometimes, several supporting documents are necessary to prove ownership. Having one's name listed on a document can provide greater security of tenure in some situations.

The **right to alienate** an asset is also an important aspect of ownership. These are captured through the **right to sell** and the **right to bequeath**.

In many countries, particularly in Asia and Africa, the full bundle of rights may not be vested in one individual. Someone could be a reported owner, but not be listed on any ownership document. Gendered social norms could influence reporting of ownership; women may never be reported as owners even if the law allows them to own property. In some contexts, due to a tenure system where land is not owned but leased for 99 years or more, one may not possess the right to sell the property but can have the right to bequeath it to their children.

The framework also illustrates the diverse forms in which assets can be held, i.e., whether owned exclusively by an individual, or jointly with household or nonhousehold members. Joint ownership with spouses is the most typical, but joint ownership with parents, siblings, other family members, and nonfamily members is also possible. The form of ownership of an asset could be significant in explaining the bundle of rights. One would expect stronger alienation rights in individual ownership, whereas in joint ownership, the distribution of rights between the owners may be subject to negotiation or determined by the social context. This may have relevance in the context of gender analysis of asset ownership and rights.

Assets are acquired via the market, through state transfers, within marriage and/or consensual union, or through inheritance or gifts. A country's legal framework that governs inheritance and marital regimes interacts with prevalent social norms to promote or discriminate against women's asset ownership. Countries that do not legally discriminate between sons and daughters in terms of inheritance may still show a male bias in property transfer due to patriarchal traditions. The marital regime that regulates marital assets (or assets within a consensual union) affects how assets are owned, either individually or jointly. Three types of marital regimes are distinguished: separation of property, partial community property, and full community property.8 Georgia and Mongolia follow the partial community property regime, while the Philippines follows the full community property regime. The main difference in these regimes is in the treatment of inherited property. In the full community property, inheritance is treated on par with marital assets; in partial community property, inheritance is kept separate from marital assets.

An asset in the EDGE framework is defined as "a store of value representing a benefit or a series of benefits accruing to the economic owner by holding or using the entity over a period of time," consistent with the 2008 System of National Accounts (SNA).

The EDGE surveys collected individuallevel data on physical and financial assets, with a broader definition of physical assets than considered under the SNA approach. Data were collected on the following items: (i) dwelling, (ii) agricultural land, (iii) livestock, (iv) small and large agricultural equipment, (v) nonagricultural enterprise owned by household members and enterprise assets, (vi) other real estate, (vii) consumer durables, (viii) financial assets, (ix) liabilities, and (x) valuables. These items were chosen because they are important in crafting policies and programs that strengthen women's property rights and promote women's empowerment. Small agricultural equipment, and consumer durables are not considered assets under the 2008 SNA, but were included along with nonagricultural enterprises owned by household members in the EDGE pilots due to their importance for livelihoods, and overall individual and household well-being.

The surveys also collected valuation data on assets for two reasons. First, valuation data enables the calculation of individual wealth, an important component of well-being. It can enable an understanding of wealth inequality among individuals. Typically, wealth inequality is higher than consumption or income inequality as it represents accumulated assets over a period of time (OECD 2015). Second, valuation captures other attributes of an asset such as quality, size, location, and so on, which are missed by a numerical count of assets owned by men and women. Often, women own fewer assets relative to men. These assets may be of inferior quality. For example, women may own a few parcels of land with poorer soil quality. Since individual wealth is determined by quantity and quality of assets, these differences in ownership patterns may show a significant gender wealth gap that is not revealed when one compares data on

Under a separation of property regime, separate ownership of property brought into marriage and any property acquired and inherited during marriage is maintained. Under a partial community property regime, property acquired during marriage by either spouse is treated as joint property of both spouses. On the other hand, all individual property brought into, acquired, and inherited during marriage is treated as the joint property of both spouses under a full community property regime.

men's and women's likelihood of owning assets. The respondents reported the value of their assets at current market price. Operationally, the collection of data on assets' values in the pilot survey posed severe challenges due to high levels of nonresponse to valuation-related questions.

Constructing Individual-Level Asset Ownership Estimates— Survey Methodology

The Georgia and Mongolia surveys (sample of 3,160 and 3,008 households, respectively) are nationally representative, while the Philippines survey (sample of 1,536 households) is representative for the province of Cavite only. The samples were selected following a two-stage stratified sampling design in Georgia and the Philippines, and a three-stage design in the case of Mongolia. Households within each selected primary sampling unit formed the succeeding sampling units.

A maximum of three adults 18 years of age or above were interviewed in each sampled household. A primary respondent was identified by the household members as the most knowledgeable member with respect to the household assets. The spouse or partner, if any, of the primary respondent formed the second respondent. The two together formed the principal couple. For households with three adult members or less, all adults were included in the sample. For households with more than three adult members, the two adults comprising the principal couple were selected with probability equal to one, and a third member was chosen randomly from the remaining adults. The total respondents interviewed were 5,937; 5,592, and 3,456 in Georgia, Mongolia, and Cavite, Philippines respectively. Table 7.1 summarizes the profile of the respondents based on the distribution of sex, marital status, and educational level.

A methodological innovation of the EDGE pilots was the construction of individual-level asset ownership estimates once such data were collected. Each respondent was asked to provide

Table 7.1: Percentage Distribution of Respondents by Sex, Marital Status, and Educational Level

Key sociodemographic variables	Georgia	Mongolia	Cavite, Philippines
Sex			
Male	42.1	44.5	46.4
Female	57.9	55.5	53.6
Marital Status			
Married	66.1	71.3	67.7
Widowed/Separated/Divorced	19.3	13.9	11.5
Never married	14.6	14.8	20.8
Educational level			
Primary or lower	3.2	26.9	17.2
Secondary	43.4	45.3	46.4
Post secondary nontertiary	24.5	n.a.	n.a.
Tertiary or above	29.0	27.7	36.4

n.a. = not applicable.

Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

individual ownership information of all assets owned either exclusively or jointly with others by each adult member of the household, including those held by themselves. The interview protocol required interviews to be conducted separately and simultaneously to prevent any bias due to information sharing among the respondents. Based on this information, individual asset ownership was analyzed and estimated following two approaches: self-assigned ownership (SAO) and ownership assigned by any respondent (OAAR).

The SAO approach considers only those assets that are owned by the respondents themselves. Thus, the information provided by the respondent on assets owned by other members of the household and in which she or he does not have a stake is ignored. The SAO approach is premised on the notion that individuals have the most accurate knowledge about the assets they themselves own.

The OAAR method aggregates information from all respondents to arrive at a universe of asset owners for all household assets. It is the most inclusive approach to identifying owners. A household member is treated as an owner as long as he or she is reported as an owner by at least one respondent. This is closer to conventional household surveys that allow for proxy reporting by one respondent, but is different in that there is more than one respondent per household. Thus, the expectation would be that ownership information is more diffused across

household members than what is obtained with one proxy respondent.

Another interesting perspective to the survey methodology was to collect information from self-assigned owners about "hidden assets," i.e., assets that the respondent owns, but has not been revealed to other household members. A large proportion of hidden assets can bias the estimates of asset ownership. It also reflects a fear of appropriation of assets or loss of control over assets, which provides insights into the larger institutional context of asset ownership.

Obviously, estimates of asset ownership will vary depending on the approach to data collection, and the data collected from the EDGE pilot surveys in the three countries also provide an opportunity to see a comparative picture or divergence in the estimates from these two approaches of calculating individual asset ownership estimates. These questions—how many people to interview in a household, whom to interview, should there be proxy reporting or self-reporting of information on asset ownership—are important considerations for survey design.

Key Results from the Surveys in Georgia, Mongolia, and Cavite, Philippines

This section presents the main findings from the EDGE pilots such as trends and patterns in asset ownership and control for men and women, and how these assets are acquired. These are examined using a gender lens, highlighting gender disparities in the asset domain.

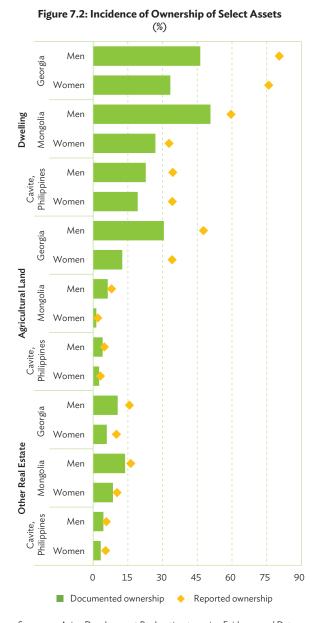
Three sets of indicators summarized by sex and other sociodemographic characteristics—incidence of asset ownership, distribution of form of ownership, and the gender wealth gap—were generated to understand inequalities in asset ownership from a gender perspective. Indicators on incidence and

distribution of asset ownership were calculated for all assets covered in the pilot surveys, while the gender wealth gap was computed only for the dwelling.

The EDGE surveys also obtained information on forms of ownership by sex (whether an asset is owned exclusively or jointly) and modes of acquisition, also by sex. These may impact the rights that owners, especially women, can wield over assets. The discussion below focuses on estimates based on the SAO approach and are calculated for individuals 18 years and above. However, a comparison of estimates for incidence of asset ownership using SAO and OAAR approaches is also presented.

Incidence of Asset Ownership: Reported and Documented

The incidence measure tells us percentage of the total adult population, by sex, are asset owners. The incidence gap or the gender asset gap is the difference in ownership rates between men and women. Figure 7.2 presents the reported and documented incidence by sex for immovable property (these are high-valued and are also likely to be income-generating assets) across the three countries. The dwelling is an important asset and is widely owned as reflected in the reported ownership numbers: by 80% of men and 76% of women in Georgia, by 60% of men and 33% of women in Mongolia, and by 34% of men and equal proportion of women in Cavite. The incidence measure for dwellings shows the highest gender gap for Mongolia, almost no gap for Cavite, and only a 5 percentage points difference for Georgia. This ranking of countries is maintained for documented ownership as well, though the proportion of men and women with documents is significantly lower, suggesting that many reported owners do not have their names on documents. This is particularly stark for Georgia where documented owners are about half of reported owners.



Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

Click here for figure data

The incidence of ownership of agricultural land is much lower in Mongolia and Cavite compared to Georgia. Landownership is less than 5% in Cavite and reflects the relatively urban nature of Cavite province. In Mongolia, landownership is only 8% and 2% for men and women, respectively, but much higher in Georgia at 48% and 34% for men and women, respectively. The relatively low proportion of land ownership in Mongolia is presumably due to the communal nature of land and the relatively high proportion of landownership in Georgia is mainly due to the receipt of private land by rural households after

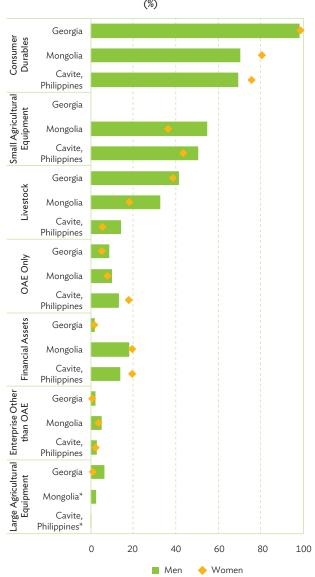
the collapse of the Soviet Union. The absolute gender gaps in incidence are of course smaller; however, the pattern of gender disparity in ownership is similar to that of the dwelling unit.

Among the immovable assets for which data are collected through the survey, the asset with the highest prevalence of ownership varies by sex and by country. The incidence of ownership is highest for the dwelling unit for men and women in Georgia (80% and 76%, respectively) but only for men in Mongolia (60%). At 36% for women in Mongolia and 51% and 44% for men and women, respectively, in Cavite, it is small agricultural equipment that has the highest ownership rate. Interestingly, livestock is held by almost 40% of men and women in Georgia, and is more commonly owned by men in the other two countries. Documented ownership rates are lower in all countries, with not much of a difference between reported and documented in Mongolia and Cavite, and ranging from 4 to 43 percentage points in Georgia.

Other real estate refers to residential and nonresidential buildings other than dwelling and nonagricultural land. Within the category of immovable property, real estate ownership is lowest in Georgia. In Mongolia and Cavite, it is higher than ownership of agricultural land, but lower than ownership of dwelling. Men and women are equally likely to own real estate in Cavite while in Georgia and Mongolia, there is a gender gap of less than 5 percentage points.

Figure 7.3 presents the incidence of assets other than immovable property summarized by sex. Ownership of large agricultural equipment is almost negligible in Mongolia and Cavite; but it is not uncommon to hold small agricultural equipment. Low ownership of large agricultural equipment could be due to low ownership of agricultural land, and often, farmers will rent the equipment due to their high costs of acquisition. The module on small agricultural equipment was not implemented in Georgia as small agricultural equipment tends

Figure 7.3: Incidence of Reported Ownership of Select Assets



OAE = own-account enterprise.

Note: * Corresponds with fewer than 25 observations and thus may

not be sufficient for data analysis.

Source: Asian Development Bank estimates using Evidence and Data

for Gender Equality pilot surveys.

Click here for figure data

to be owned by all household members. However, ownership pattern among men and women seems more distinct for large agricultural equipment, with only 1% of Georgian women owning such equipment compared to 6% of Georgian men. Approximately 40% of both men and women adult population in Georgia own livestock; whereas at 33% for men and 18% for women, the gender gap in ownership is highest in Mongolia.

Overall, the incidence of ownership of nonagricultural enterprises is low for both men and women and concentrated in the own-account enterprises—defined as those with no paid workers but possibly employing (unpaid) contributing family workers—suggesting that these are fairly small operations. Interestingly, in Cavite, the gender gap is reversed in favor of women for own-account enterprises, but not for enterprises that employ at least one paid worker.

As expected, the incidence of ownership of consumer durables is highest among all assets in all the three countries, with overall incidence in favor of women. On the other hand, the results suggest that women are slightly more likely to own financial assets than men in Mongolia and Cavite.⁹

Comparing overall trends, men are more likely to be owners of assets than women in all three countries. On average, the gender gap in incidence is highest in Mongolia for most assets and lowest in Cavite. Focusing on immovable property, men in Mongolia are twice as likely as women to own their dwellings, four times as likely to own land, and a little more than one-and-a-half times as likely to own other real estate.

The incidence of hidden physical assets was observed to be less than 2% in all three countries with the exception of financial assets and liabilities. Mongolia shows the lowest proportion of hidden financial assets and liabilities; the highest incidence is in Georgia for financial assets; while Cavite is highest for liabilities, though still less than 5%. The gender gaps in the proportion of hidden assets are not substantive, with the maximum gap being 4 percentage points for financial assets in Mongolia.

The estimates of incidence of ownership of financial asset are lower than expected. This finding could be attributed to the limitations on how the concept of financial assets was conceptualized in the survey instruments. Further investigation is needed to be able to understand this issue.

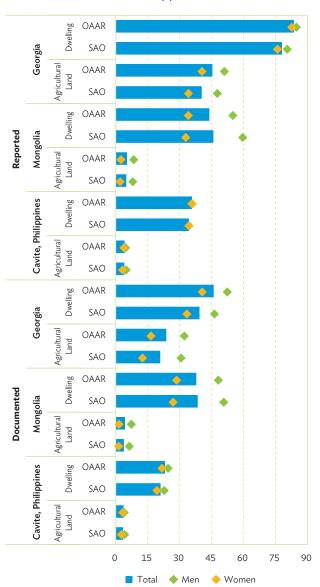
Lastly, comparing SAO and OAAR, the results suggest that the estimates of the incidence of reported and documented ownership are generally higher using the OAAR approach but there are variations across asset types, sex, and country. On average, these differences are small, less than 5 percentage points in most instances, barring a few. Georgia shows the largest difference for reported and documented ownership, where the self-assigned approach gives lower estimates for dwelling and agricultural land incidence rates for men and women (Figure 7.4). Rather surprisingly, reported and documented ownership for Mongolian men using the selfassigned approach is higher by 5 and 3 percentage points, respectively, suggesting a lack of information sharing within the household on such matters.

On the other hand, the trends in gender disparities in ownership do not change. A larger proportion of men are more likely to own dwelling and agricultural land compared to women, with the greatest disparities in Mongolia, and almost negligible in Cavite.

Gender Wealth Gap

There are a couple of advantages to the incidence indicator. For one, data for it are relatively easy to collect. For another, it lends itself to easy interpretation: what proportion of the population by sex are homeowners or owners of agricultural land? There is, however, information that incidence indicators cannot provide. For example, incidence indicators mask variations in the quantity owned, say, of agricultural land. In computing for proportions, an individual with 10 hectares of land is treated equally as an individual with 0.5 hectares of land. In addition, incidence indicators also do not reveal the quality of the asset in question. In such cases, the gender wealth gap complements the gender incidence gap. Following other surveys, valuation in the EDGE pilots was based on current sale price where respondents were asked to value the asset if it were to be sold on the date of the interview.

Figure 7.4: Comparison of Estimates of Incidence of Ownership of Select Assets Using Self-Assigned Ownership and Ownership Assigned by Any Respondent Approaches (%)



OAAR = ownership assigned by any respondent, SAO = self-assigned ownership.

Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

Click here for figure data

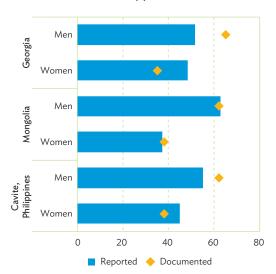
However, there are several challenges associated with the collection of valuation data and construction of wealth indicators. Depending on the asset and the context, it may be difficult to obtain valuation data due to missing markets, lack of awareness of the respondent regarding markets prices, or simply reluctance to share sensitive financial information.

These lead to a high proportion of missing values, which might render the data less reliable or unusable. Considering the dwelling example, the EDGE pilots show some variation in the proportion of missing values. On average, women are less likely than men to provide a value for their dwelling. At 15% for men and 18% for women, the nonresponse for dwelling valuation is lowest in Mongolia, followed by Cavite (48% for men and 60% for women); then Georgia (65% for men and 72% for women). Obviously, the nonresponse rates for valuation of dwelling in Cavite and Georgia are very high for both men and women and therefore any estimates using this data will be subject to limitations. Unsurprisingly, there are more missing values for agricultural land than dwelling. The trends for men and women's responses across the three countries are similar to that of valuation of the dwelling unit. Imputation of missing values is a possibility, but it requires information on asset characteristics that may be correlated with its value.

Another aspect to valuation is that once data is obtained, it is important to ensure that there is no double counting of assets. For example, if an asset is jointly owned, the value of the asset must be apportioned among all the owners, equally or in the same ratio as indicated by the ownership share.

Keeping these caveats on data in mind, we now consider the gender wealth gap for the dwelling unit based on the self-assigned ownership of assets (Figure 7.5).¹⁰ Looking at the wealth shares based on reported ownership of dwelling, in no country is women's share of dwelling wealth greater than 50%. At 49%, it is almost equal in Georgia, followed by Cavite at 45% and Mongolia at 37%. Contrasting women's share of wealth to their share of owners provides some insights. In Georgia and Cavite, women represent more than half of all reported dwelling owners (53% and 51%, respectively), but their share of dwelling wealth is lower than 50%, suggesting that the dwellings owned by women may

Figure 7.5: Share of Men and Women in Total Value of Dwellings (%)



Notes: Estimates are weighted and calculated based on self-assigned ownership approach. The share of men and women owners in the population corresponds to owners who have reported and documented values of dwellings and excludes owners who are nonhousehold members. Philippines refers to the province of Cavite.

Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

Click here for figure data

be less valuable than those owned by men. Figure 7.5 also presents wealth shares calculated based on documented ownership. Compared with reported ownership, the gap becomes more pronounced for documented ownership in Georgia and Cavite, while it is more or less same in Mongolia.

Mode of Acquisition

As earlier illustrated in the conceptual framework (Figure 7.1), men and women acquire their assets in several ways, an understanding of which can help in addressing gender inequalities in asset ownership. For the dwelling unit, the market is the dominant means of asset acquisition for women in Mongolia (48%) and Cavite (50%), whereas women in Georgia are most likely to acquire it through marriage or custom (39%), followed by purchase (32%). The pattern is similar for men who are most likely to purchase their dwelling in Mongolia and Cavite, but about 45% of men owners receive it as a gift from a household member in Georgia. At 34%, purchase is the second most prevalent means of acquiring a dwelling

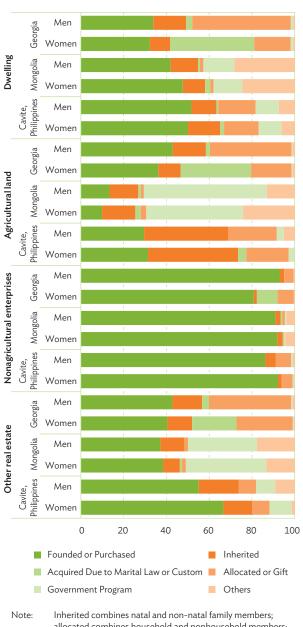
Although wealth gap between men and women can be calculated for other types of assets, there are technical issues associated with doing such calculations. Thus, we focus on dwelling only.

for male owners in Georgia. Inheritance, whether natal or marital, while not totally unimportant, is also not a typical means of acquiring a dwelling; at 15%, inheritance is relatively more important for women in Cavite than in the other countries. The patterns are largely similar for male inheritance. Between 10% to 15% of male and female owners are beneficiaries of government programs in Mongolia and Cavite. On the other hand, nonagricultural enterprises were mostly founded directly by the respondents and no substantial difference is observed between men and women (Figure 7.6).

In general, with regard to dwellings, EDGE results suggest that the modes of acquisition are not gender-biased in Cavite. On the contrary, in Mongolia, markets and marital custom are slightly biased toward women, while inheritance shows a slight male bias. In Georgia, one finds more significant gender biases. Women are less likely than men to inherit or receive a gift from household members, but more likely to acquire via marital law and custom.

The mode of acquisition of agricultural land shows greater variation between countries, but is more similar for men and women within countries. For both men and women, the dominant means to acquire land is through purchases in Georgia (43% and 36%, respectively); via government programs in Mongolia (57% and 45%, respectively); and through inheritance in the Philippines (39% and 42%, respectively), which is almost fully comprised of natal family inheritance. Among the three countries, purchase of land is least common in Mongolia, presumably due to the communal nature of land. Acquisition within marriage or custom is the second most prevalent means for Georgian women, while it is natal inheritance11 for women in Mongolia, and purchasing for women in Cavite. It is worth noting that unlike Georgia and Mongolia, there is no gender bias in market participation in Cavite, with about 30% of men and women purchasing their agricultural land.

Figure 7.6: Distribution of Mode of Acquisition of Select Assets



Note: Inherited combines natal and non-natal family members; allocated combines household and nonhousehold members; and others combines encroachment, "do not know", and other responses. "Founded" relates to nonagricultural enterprises

Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

Click here for figure data

Purchase is the dominant mode of acquisition for other real estate in all three countries, with similar levels between men and women within each country. Cavite is the exception, with a greater proportion of women purchasing property than men (67% versus 55%). In line with the patterns observed for other

¹¹ The ranking excludes acquisition classified under "others" category.

property (dwelling and agricultural land), the second most prevalent means of acquiring other real estate is marital law and custom for Georgian women (but not for men who acquire through allocation or gift from household members); government allocations for men and women in Mongolia (32% and 38%, respectively); and natal inheritance for men and women in the Philippines (18% and 11%, respectively).

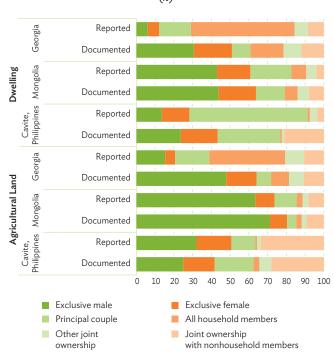
There seems to be no male bias in inheritance in Cavite; in fact, for dwelling and agricultural land, women are more likely to inherit than men. In Georgia, women are purchasing immovable property, but there is also a substantive proportion of women who acquire their assets within the institution of marriage, reflecting the importance of the partial community of marriage regime followed in that country.

Forms of Ownership and Alienation Rights over Assets

Asset incidence measures, while providing a sense of the prevalence of asset ownership by men and women, do not reveal any information on whether the asset is owned exclusively or jointly owned with one or more individuals. The forms of ownership are influenced by inheritance and marital regimes, which in turn impact the bundle of ownership rights (Figure 7.1). Figure 7.7 presents different forms of ownership by sex for dwelling and agricultural land in Georgia, Mongolia, and Cavite.

For dwelling owners, there is no variation in trend (except for Georgia) between reported and documented ownership. In Mongolia, exclusive male owners are dominant (43% and 44% for reported and documented, respectively), while in Cavite, ownership by the principal couple is the most prevalent 63% and 33% for reported and documented, respectively. This partly reflects the Philippines's full community of property marital regime whereby marital assets are treated as joint, whether inherited or acquired. In Georgia, all household members are

Figure 7.7: Distribution of Forms of Asset Ownership



Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

Click here for figure data

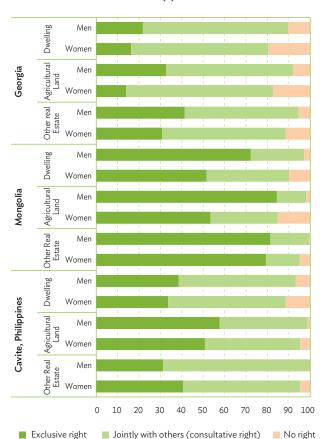
the dominant category as reported owners (55%), but this moves to exclusive male owners for documented ownership (31%), suggesting that the perception of ownership is more inclusive than the documented reality (Figure 7.7).

Agricultural land shows more variation between reported and documented ownership. Reported ownership by all household members (40%) is most common in Georgia. In Mongolia and Cavite, men are most likely to be exclusive owners. Reported and documented ownership with nonhousehold members is also common in Cavite, reflecting the relatively urban nature of Cavite province, with urban households co-owning agricultural land in rural areas with extended family members. (Recall from Figure 7.2 that less than 5% of the adult population in Cavite owns any agricultural land.) Similar with Georgia, the proportion of exclusive male owners is higher for documented than reported dwelling owners in Mongolia, and mainly comes

at the expense of women as exclusive owners, and principal couple owners. On average, the gender gap in exclusive ownership is highest in Mongolia for reported and documented owners of immovable property and is also high for documented ownership for agricultural land in Georgia.

Gender differences in alienation rights over assets, selling, or bequeathing as depicted in Figures 7.8 and 7.9 are quite stark across the three countries, and to a certain extent, mirror the forms of ownership. Male owners are more likely to have stronger alienation rights than female owners as to sale and bequeathing of assets. The dwelling is the

Figure 7.8: Distribution of Rights to Sell of Select Assets (%)



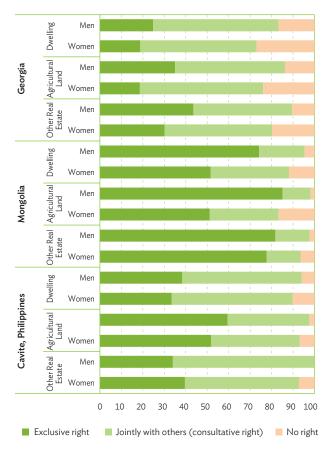
Note: The number of observation for large agricultural equipment is too small to facilitate comparison of categories of right to sell. Detailed information on the number of observations can be found at https://www.adb.org/sites/default/files/publication/357006/sdgedge-fig-7-8.xlsx

Source: Asian Development Bank estimates using Evidence and Data for Gender Equality pilot surveys.

most commonly held asset across countries, where the right of sale for men and women, respectively, are 90% versus 80% in Georgia, 97% versus 90% in Mongolia, and 93% versus 88% in Cavite (Figure 7.8).

A larger proportion of Mongolian men and women owners have exclusive alienation rights over sale and bequeathing compared to owners in the other countries. For example, nearly three quarters of Mongolian male owners have exclusive rights to bequeath their dwelling compared to 25% and 38% for men in Georgia and Cavite, respectively. Similar trends are observed with women owners as well in Mongolia. About 52% have an exclusive right to

Figure 7.9: Distribution of Rights to Bequeath of Select Assets (%)



Note: The number of observation for large agricultural equipment is too small to facilitate comparison of categories of right to bequeath. Detailed information on the number of observations can be found at https://www.adb.org/sites/default/files/publication/357006/sdgedge-fig-7-9.xlsx

Source: Asian Development Bank estimates using EDGE pilot surveys.

bequeath their dwelling, compared to 19% and 34% in Georgia and Cavite, respectively (Figure 7.9). This can be related to the relatively strong individual ownership patterns that are evident among Mongolian men and women.

Within Mongolia however, the proportion of female owners with no rights of alienation is higher than the proportion of male owners with no rights, reflecting a gender bias against women owners. It is Georgian women though, who seem the most disadvantaged compared with Mongolian and Cavite women owners in terms of having no economic rights over their assets. Almost one-fifth of women owners do not have any right to sell their dwelling or land, while a quarter do not have any bequeathing rights over these assets. Further, the results suggest that consulting rights are more prevalent in Georgia for both men and women. This could presumably be due to how the asset was acquired. Allocation or gifts from household members is the dominant mode for men, while women acquire due to custom, or within the marriage, or from household members, which could possibly explain why economic decisions regarding these assets are either taken consultatively, or with women are excluded.

Women in Cavite, on the other hand, are more likely to have purchased their immoveable property or inherited it from their natal family, which ensures that they are not deprived of their economic rights over their assets. On average, the proportion of owners in Cavite with no rights to sell or bequeath their assets is largely smaller than those in the other countries. The survey results suggest that exploring how men and women acquire and own assets provides a perspective to the enjoyment of rights over these assets (Figures 7.8 and 7.9).

Summary

Collecting sex-disaggregated data on asset ownership is a critical step in in building evidence toward bridging inequalities with respect to women's access to and control over productive resources. The lack of comparable national-level data on men and women's asset ownership using standard concepts is a serious constraint in shaping policy and programs that promote gender equality.

Even as absence of standardized methodological approaches for collecting individual-level asset data has been a constraint, these data are typically not collected by national statistical agencies for several reasons: time taken to administer the survey, financial and technical capacity constraints, cultural notions of how property or assets may be owned, and so on. The EDGE pilot surveys in Georgia, Mongolia, and the Philippines conducted by national statistics offices are powerful case studies as they have demonstrated that with the availability of standardized methods and guidelines, such data collection is feasible. The key contribution of the three pilot surveys is the development of methodological guidelines by the United Nations Statistics Division efforts under the global EDGE initiative for collecting such data. These guidelines are grounded in field experience, and with minimal adaptation can be applied across diverse geographies and social contexts. The methodological and practical experience through the three pilot surveys under ADB's project along with other methodological surveys and approaches piloted in Maldives, Mexico, South Africa, and Uganda also under EDGE initiative provide a solid basis for finalizing the United Nations methodological guidelines on the production of statistics on asset ownership from a gender perspective.

It is important to reiterate a few valuable lessons learned through these pilot surveys. First, one needs a basket of indicators (incidence, distribution, forms, wealth) to undertake a comprehensive gender analysis of asset ownership. Depending on what is being examined, the objectives of data collection can be defined while being cognizant of its strengths and limitations. Second, with clarity on survey objectives and information needs, it is possible to prioritize an indicator or set of indicators and

decide data collection, i.e., the survey design, survey questionnaires, and sampling methodology. Third, collection of valuation data through household surveys is challenging. It may be necessary to supplement survey data with other administrative information, or to plan ahead for imputation of missing data.

The pilot surveys have produced an extremely rich data on asset ownership and control at the individual level and provided valuable lessons for the methodological guidelines for data collection. For this initiative to become part of statistical program of national statistics agencies and sustainable in the long term, both data producers and data users—have to work together. There has to be a conscious effort to ensure that such data is produced regularly, is of the highest quality, and is disseminated in a timely fashion. It is also incumbent on policy makers, researchers, and the larger development community to utilize such data to monitor the progress of and advocate for gender equality in the economic sphere.

References

- D. Ali, K. Deininger, and M. Goldstein. 2011. Environmental and Gender Impacts of Land Tenure Regularization in Africa: Pilot evidence from Rwanda. World Bank Policy Research Working Paper. No. 5765. Washington, DC. https://openknowledge.worldbank.org/ handle/10986/3527
- Asian Development Bank (ADB). 2016. *Key Indicators for Asia and the Pacific 2016*. Manila. http://www.adb.org/sites/default/files/publication/204091/ki2016.pdf
- J. Bonilla, et al. 2017. Cash for Women's Empowerment? A Mixed-Methods Evaluation of the Government of Zambia's Child Grant Program. World Development. 95 (C). pp. 55– 72. http://www.sciencedirect.com/science/ article/pii/S0305750X15311682

- C. Deere, G. Alvarado, and J. Twyman. 2012. Gender Inequality in Asset Ownership in Latin America: Female Owners vs Household Heads. *Development and Change*. 43 (2). pp. 505–530. http://onlinelibrary.wiley.com/doi/10.1111/j.1467-7660.2012.01764.x/full
- C. Doss. 2006. The Effects of Intrahousehold Property Ownership on Expenditure Patterns in Ghana. Journal of African Economies. 15(1). pp. 149–180. https://www.researchgate. net/publication/5212968_The_Effects_of_ Intrahousehold_Property_Ownership_on_ Expenditure_Patterns_in_Ghana
- S. Garikipati. 2009. Landless But Not Assetless: Female Agricultural Labour on the Road to Better Status, Evidence from India. *Journal of Peasant Studies*. 36 (3). pp 517–545. https://www.researchgate.net/publication/248943632_Landless_But_Not_Assetless_Female_Agricultural_Labour_on_the_Road_to_Better_Status_Evidence_from_India
- M. Goldstein and C. Udry. 2008. The Profits of Power: Land Rights and Agricultural Investment in Ghana. Journal of Political Economy. 116(6) pp. 981–1022. Chicago: University of Chicago Press. http://siteresources.worldbank.org/INTPUBSERV/Resources/4772501186007634742/GoldsteinProfitsofPower.pdf
- N. Nour. 2009. Child Marriage: A Silent Health and Human Rights Issue. *Reviews in Obstetrics and Gynecology*. 2 (1). pp. 51–56. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2672998/
- A. Oduro and H.A. Seshie-Nasser. 2016. Delayed Primary School Enrolment among Boys and Girls in Ghana. *International Journal of Educational Development*. 49. pp. 107–114. http://www.sciencedirect.com/science/article/pii/S0738059315300304
- Organisation for Economic Co-operation and Development. 2015. Household Wealth Inequality across OECD Countries: New OECD Evidence. OECD Statistics Brief. https://www.

- oecd.org/std/householdwealth-inequality-across-OECD-countries-OECDSB21.pdf
- P. Panda and B. Agarwal. 2007. Toward Freedom from Domestic Violence: The Neglected Obvious. *Journal of Human Development*. 8 (3). pp. 359–388. https://www.amherst.edu/media/view/92083/original/freedom%20from%20 domestic%20violence.pdf
- A. Peterman, et al. 2011. Understanding the Complexities Surrounding Gender Differences in Agricultural Productivity in Nigeria and Uganda. *The Journal of Development Studies*. 4(10). pp. 1482–1509. http://www.tandfonline. com/doi/abs/10.1080/00220388.2010.536222
- A. Quisumbing and J. Maluccio. 2000. *Intrahousehold Allocation and Gender Relations*. FCND Briefs.

 No. 84. Washington, DC: International Food Policy Research Institute. http://ageconsearch.umn.edu/record/15932/files/dp00084b.pdf
- H. Swaminathan, J. Suchitra, and R. Lahoti. 2011.

 Karnataka Household Asset Survey: Measuring
 the Gender Asset Gap. Bangalore. Indian
 Institute of Management Bangalore. http://
 genderassetgap.org/sites/default/files/KHAS.
 MeasuringGenderAssetGap.2011.pdf
- J. Twyman, P. Useche, and C. Deere. 2015. Gendered Perceptions of Land Ownership and Agricultural Decision-Making in Ecuador: Who are the Farm Managers? *Land Economics*.
 91 (3). pp. 479–500. http://le.uwpress.org/content/91/3/479.full.pdf+html
- United Nations. 1948. *Universal Declaration of Human Rights*. http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf
- United Nations. 2013. Fundamental Principles of Official Statistics. https://unstats.un.org/unsd/ dnss/gp/FP-Rev2013-E.pdf
- United Nations. 2015. Transforming Our World: The 2030 Agenda for Sustainable Development.

- http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP). 2015. Statistical Yearbook for Asia and the Pacific 2015. United Nations: New York. http://www.unescap.org/sites/default/files/SYB2015_Full_Publication.pdf
- United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP). 2016. Statistical Yearbook for Asia and the Pacific 2016: SDG Baseline Report. United Nations: New York. http://www.unescap.org/sites/default/files/publications/ESCAP_SYB2016_SDG_baseline_report.pdf
- United Nations Department of Economic and Social Affairs (UN DESA). 2015. World Urbanization Prospects 2014 Revision. United Nations: New York. https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Report.pdf
- United Nations Department of Economic and Social Affairs (UN DESA). 2007. *Proportion of Urban Population Living in Slums*. http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/poverty/urban_slums.pdf
- United Nations Department of Economic and Social Affairs (UN DESA). 2017. Cape Town Global Action Plan for Sustainable Development Data. United Nations: New York. https://undataforum.org/WorldDataForum/wpcontent/uploads/2017/01/Cape-Town-Action-Plan-For-Data-Jan2017.pdf
- R. Vijaya, R. Lahoti, and H. Swaminathan. 2014. Moving from the Household to the Individual: Multidimensional Poverty Analysis. World Development. 59. pp. 70–81. https://doi. org/10.1016/j.worlddev.2014.01.029

