

## Measuring Empowerment of Rural Women Farmers and Producers:

### What can we learn from a gender and assets perspective?

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#### Introduction

Measuring rural women's *economic* empowerment<sup>1</sup>—their ability to earn and control income, broadly defined to include value of home produced goods and services as well as leisure time—is challenging. There are inherent problems in valuing agricultural output, family labor, and other contributions in kind to the family farm or enterprise, particularly when many inputs and products are not marketed, as well as difficulties in measuring women's degree of control. Many of the projects in ExxonMobil's Women's Economic Opportunity Initiative (WEOI) portfolio, including those programs involving skills development, training, and network and group formation, and those promoting the adoption of new technologies or equipment that are targeted to rural women, would be subject to these measurement challenges when identifying their impact on women's economic empowerment. These projects include: (1) farming associations and networks, modern agricultural inputs, mobile phones for financial transactions and market information, rural electrification in the portfolio's current projects, and (2) savings and integrated services for subsistence farmers as potential projects.

#### Desired outcomes: Focusing on gender and assets

We focus on **assets** as an outcome measure for project evaluation. Many projects use income-based measures as indicators of project success, however assets may have the advantage of being both easier to measure and more accurate predictors of empowerment, in economic and as well as other realms. The work of Michael Sherraden, Chris Barrett, Michael Carter, as well as our own provides a conceptual basis for this. Access to, control over, and ownership of assets are the basis of rural people's livelihoods, which is acknowledged by the central place of tangible and intangible assets in the Sustainable Livelihoods framework (DfID 2001, Box 1).<sup>2</sup> Assets have also been acknowledged as critical in both accumulating wealth and managing vulnerability. Programs to increase ownership of and control over assets also help provide more permanent pathways out of poverty compared to programmatic measures that aim to increase incomes or consumption alone. Beyond their economic effects, assets may also influence the current and future wellbeing of an individual or household in a variety of ways, such as improved future orientation and outlook on life; greater social empowerment, such as improved social status and feelings of social inclusion, and enhanced civic and political engagement; decreased risk-taking behaviors and improved awareness and improved economic/social behaviors and wellbeing of offspring (Schreiner and Sherraden 2007).

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<sup>1</sup> Naila Kabeer (1999) defines empowerment as people's ability to make strategic life choices, particularly in contexts where this ability had been denied to them. The domains over which individuals—particularly women—make strategic life choices are not limited to economic domains, but also those that affect their well-being, their status and identities within their households and communities. These may include choices over whether to marry, whether to have children (and how many children to have), and to be able to travel freely to visit friends and relatives. This think piece, however, focuses on the economic aspects of empowerment.

<sup>2</sup> Our work does not focus explicitly on political capital—many discussions of asset portfolios (for example, Bebbington 1999; DfID 2001) only refer to the first five types of assets. For more on the inclusion of political capital see Bauman 2005.

Attention to **gender** and assets, including gendered use and control as well as ownership over those assets, emerged out of work on testing models of household behavior that dismantled the idea of the unitary household, creating in its place a more nuanced understanding of how, within households, incomes are not always pooled, but can be held and managed by individuals. Assets are also owned and managed by individuals, and the gendered distribution of assets within the household is an important determinant of ability to generate income, as well as how income and other household resources are spent, and on which household members.

Given the importance of asset ownership to development outcomes, we need to know more about current ownership pattern, how they are evolving, and what factors influence them. Various efforts have attempted to unpack gendered asset use, control, and ownership of assets. In the 1990s, IFPRI's gender and intrahousehold research program began collecting sex-disaggregated asset data, focusing on the assets that spouses brought to marriage, and those that they held at the time of interview. More recently, the Gender Asset Gap Project was designed to demonstrate both the importance and feasibility of collecting individual-level asset data, by collecting nationally-representative data in Ecuador and Ghana, and data representative of the state of Karnataka, India.<sup>3</sup> The Gender, Agriculture, and Assets Project (GAAP) tested the feasibility and usefulness of using gender-asset indicators as outcome measures in the evaluation of agricultural development projects in South Asia and Africa south of the Sahara. The Women's Empowerment in Agriculture Index (WEAI), which contains components related to tangible (resources) and intangible (leadership) assets, is being used to assess the impact of projects funded by the US Feed the Future Initiative (Alkire et al. 2013). We draw heavily on the results and lessons learned from these projects, most of which are still ongoing, in what follows.

#### **BOX 1: TYPES OF ASSETS AND CAPITALS**

- natural resource capital: land, water, trees, livestock, genetic resources, soil fertility;
- physical capital: agricultural and business equipment, houses, consumer durables, vehicles and transportation, water supply and sanitation facilities, and communications infrastructure;
- human capital: education, skills, knowledge, health, nutrition; these are embodied in the labor of individuals;
- financial capital: savings, credit, and inflows (state transfers and remittances);
- social capital: membership in organizations and groups, social and professional networks. and
- political capital: citizenship, enfranchisement, and effective participation in governance

Source: Adapted from Meinzen-Dick et al. 2011; see also DfID 2001

### **Linking interventions to outcomes and impact**

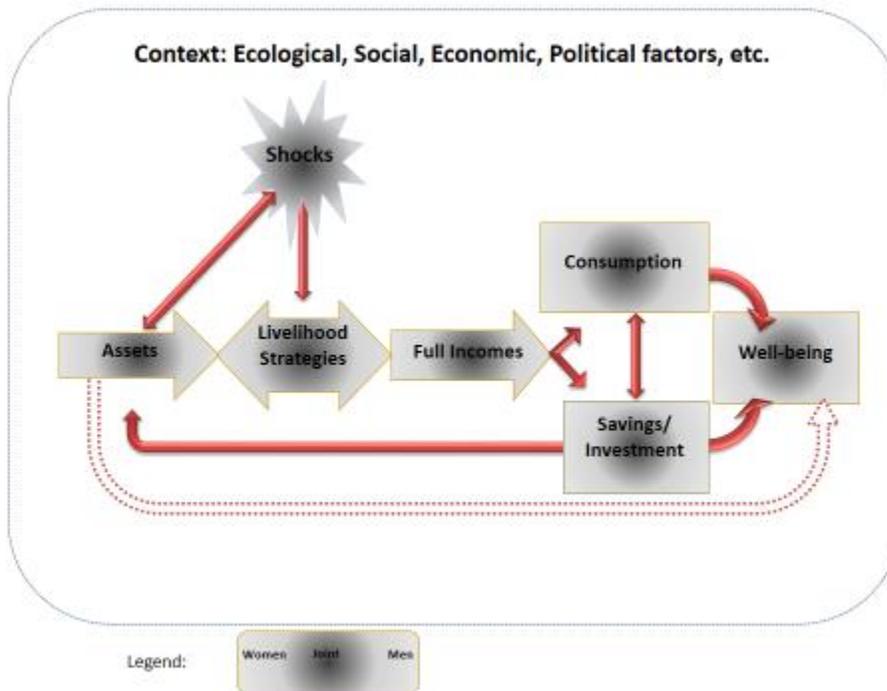
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<sup>3</sup> [www.genderassetgap.org](http://www.genderassetgap.org). Unlike the earlier intrahousehold work of IFPRI, the Gender Asset Gap project collected information on a wider range of assets, for all individuals within the household, not just the primary male and female.

The Gender, Agriculture, and Assets Project (GAAP) framework (Figure 1) shows the links between assets and well-being while making clear that gender relations influence the constraints and opportunities that occur in each pathway (Meinzen-Dick et al. 2011). Each component of the framework is gendered. Women and men often have separate assets, activities, and consumption and savings or investment strategies, but households can also have joint assets, activities, consumption, and strategies. The shading of each box reminds us that we need to consider separation and jointness in each component.

In this conceptual framework, tangible and intangible assets determine livelihood strategies. Subject to the realization of unexpected positive or negative events (shocks), these livelihood strategies generate full incomes, which can be consumed or saved/invested. We refer to full incomes because they do not only include monetary incomes and income in kind, but also the value of time—an important resource that, if overlooked, tends to underestimate women’s contributions and, as a result, may overestimate net income gains. Allocation of full income to consumption or savings results in well-being outcomes, including health, nutrition, self-esteem, and empowerment. This entire process is nested within the context, the set of ecological, social, economic, and political institutions that determine societal and gender norms. The dotted arrow also indicates that assets can directly affect well-being if, for example, there is status or self-esteem associated with asset ownership. The direction of causation does not only go from assets to well-being: livelihood strategies also affect the assets that individuals choose to hold, and savings and investments determine the future size and composition of the asset portfolio.

Figure 1. The GAAP conceptual framework



The framework can be used to look at many types of interventions. Among the agricultural development projects included in GAAP, there were two main types. The first was projects that distributed assets to beneficiaries, thus directly affecting the Asset box in the framework. The second type of project influenced

the Livelihood Strategies box by making available information or technologies that altered the returns that households received from their existing assets. Many interventions did both.

### *Some findings and lessons from the GAAP evaluations*

Eight agricultural development projects were included in the GAAP portfolio. Projects were able to increase women's assets, even where asset distribution was not part of the program. In half of them, the increase in tangible assets was significant relative to a control group (Santos et al 2013; van den Bold et al, 2013; Quisumbing et al, 2013; Das et al, 2013). Women did not control all assets transferred to them, but they did control some, and changes were visible in the relatively short time frame of most projects. Joint ownership was often an important avenue for increasing women's assets.

Gendered distribution of assets matters for technology adoption and livelihood strategies (Gilligan et al, 2013; Savath et al, 2013). Increasing women's control and ownership of assets, tangible and intangible, can increase their participation in decisions about household livelihood strategies (van den Bold et al, 2013; Santos et al, 2013; Johnson et al, 2014; Das et al 2013).

Almost all projects reported increases in household cash income (gross)<sup>4</sup>, but also increased input use, especially demands on time of household members, so that ultimately, the impact on full income was not always clear. In most cases women controlled relatively little of the increases in income, even where they had some rights to the asset. However, in a few cases, they increased their influence in spending decisions (Santos et al 2013; Quisumbing et al 2013). Where production was primarily for home consumption, women tended to maintain more control of both the product and any income that was earned.

Women perceived many intangible benefits from the projects that were, in some cases, associated with the changes in their use, control and ownership of assets: self-esteem (Das et al, 2013; Quisumbing et al 2013), family unity (Johnson et al, 2014) and mobility (Quisumbing et al, 2013). There is even evidence that projects may have influenced social norms about women's ability to use and own land (van den Bold et al 2013).

### **Outcome measures and proxy indicators**

Considering the range of projects within the WEOI, we propose outcome measures that include both tangible and intangible assets (Box 1). Information on the assets would include that indicating men's and women's exclusive and joint use, control, and ownership of those assets.

### *Measuring tangible assets*

Many of the assets relevant to the WEOI are tangible physical assets that can be owned individually or jointly within households, like mobile phones and irrigation equipment (such as small scale treadle pumps). Other physical assets might be viewed as public or group assets, such as rural electrification facilities, or community-constructed irrigation.

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<sup>4</sup> Collecting full income data for women and men is very difficult, especially for agricultural, livestock, or informal sector activities with small and/or irregular payments and considerable in-kind production. Even if cash income can be accounted for, it provides an incomplete picture, without including in-kind production and time. Some projects did a better job than others of measuring income quantitatively but none measured it completely. All projects complemented quantitative measures with qualitative assessments of income control, and these consistently reported low levels of control by women.

There are several options that can be used to measure tangible assets.

One approach is to first obtain an inventory of all of the relevant assets owned by anyone in the household. Standardized lists are available, or qualitative work can be done in project communities to identify which are the relevant assets for men and for women. Then, for each asset, the respondent is asked who owns the asset. Respondents can list the IDs (from the household roster) to identify the owner. An additional series of questions about the rights over each asset can be asked, similarly noting the ID of the person(s) with the rights. Information on the value of the asset is very useful to collect since women tend to own less valuable assets, and it also facilitates aggregation across the asset portfolio (Doss et al. 2011).<sup>5</sup> It is useful to ask both men and women about their rights over assets. A single respondent may not know of all assets, or his/her response may not reflect the perceptions of other individuals. In particular, men may not provide information that reflects women's perceptions of their rights.

In the WEAI "resources" module, for each type of asset aside from asking who owns most of the assets, we also ask a male and a female respondent who can decide whether to sell, give away, mortgage, or rent out the item most of the time, and who contributes most to decisions regarding a new purchase of such items. Questions regarding rights to sell, mortgage, rent out, or give away the asset aim at identifying ownership (alienation) rights, but this set of indicators could also have asked "who uses this asset most of the time" (use rights) in addition to other forms of control (decisionmaking) over the asset. In the case of programs encouraging the adoption of machinery (e.g. treadle pumps), paying attention to "who decides whether to purchase asset" or "who uses this asset most of the time" can get at gender gaps in ability to purchase the asset, as has been documented by Kickstart (Njuki et al. 2013), or gender gaps in the ability to use an asset that the "household" owns. It also helps to document links, or lack thereof, between use of an asset and control over income generated.

### *Measuring financial assets*

For financial assets, it is useful to interview each person about his or her own financial assets. One person may not know about all of the financial assets of everyone in the household or even of his or her spouse. Questions should ask about all relevant forms of savings and accounts; with the advent of many microfinance institutions, the line between formal and informal savings is increasingly blurred. In addition, they should ask whose names are on the account to identify whether they are individually or jointly held. Finally, for formal savings accounts, it is useful to know whether there is a positive balance; some people simply use formal accounts as a way to receive their paychecks, but not as a place for saving.

The WEAI asks about availability of credit in cash or kind from formal and informal sources at the household level, and whether the male or female respondent participates in decisionmaking about credit from that source. A complete picture of financial assets would also include information about remittances and public sector transfers.

### *Measuring intangible assets*

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<sup>5</sup> Asset indices provide another means of aggregating.

Many agricultural development projects work through groups to deliver services, and therefore provide opportunities for women and men to build up their social capital. The “leadership” domain of the WEAI, for example, asks whether women belong to formal and informal groups, and whether they participate in the group’s activities. In addition to group membership, social networks are another important form of social capital. GAAP studies in Uganda and India used measures of men’s and women’s social networks to study the effect of networks on adoption of improved technologies, however they did not look at the impact of the projects on social networks.

In terms of human capital, the training provided by many projects also allows women to build up their skills, not only for their intrinsic value, but also because it increases their self-esteem and their families’ and communities’ respect for them. In the LandOLakes program in Mozambique, for example, even though dairy cows were considered to be men’s assets, women reported that the important contributions they make to the care and maintenance of the cow—made possible by the technical knowledge that they acquired in the trainings—led their husbands to consult them more in decisions (Johnson et al, 2014). There are also added impacts of acquiring physical and social assets: beneficiaries of BRAC’s targeted asset transfer program mentioned the gains in terms of status and social capital that resulted from having more assets (and household income derived from those assets) (Das et al. 2013).

### **Merits of indicators for program assessment**

Measuring gendered use, control and ownership of assets is **feasible** for projects. Much has been learned about the best ways to do this, and asset modules are available that can be used directly or adapted. Because of the importance of capturing types of rights (use, control, and ownership), who holds them, and whether they are held exclusively or jointly, gathering data can quickly become complex. By thinking through in advance how a project is likely to affect asset ownership and by gathering background information, from secondary sources or rapid, qualitative assessments, program evaluators can focus data collection on aspects that are most likely to be relevant to their interventions.

Evidence from GAAP has shown that, at least in the case of agricultural development interventions, gendered-asset ownership is **responsive to project interventions** of relatively short duration (3-5 years), even when projects do not distribute assets as part of the intervention. Even when projects do distribute assets, collecting data on gendered control and ownership tells something new because women do not necessarily retain control of assets that are given to them by a project.

Perhaps most importantly, a good indicator is a **valid predictor of the outcome** of interest, in this case women’s economic empowerment. Empowerment, like poverty, is not an outcome that is easily defined by a single, quantitative indicator. While there are conceptual and practical reasons why asset-based measures might be better indicators of long-term, economic wellbeing than income-based measures, there is not enough evidence from program evaluation to be able to recommend women’s UCO of assets over women’s control of income or other indicators like women’s degree of participation in economic decisionmaking. Perhaps with more evidence, we will better understand how these three dimensions of economic empowerment relate to each other, and which is best under what circumstances.

In the meantime, what we do know is that the different types of measures, especially asset-based and income-based measures, do not appear to be strongly correlated as program outcome indicators. They tell us different things about how the program is affecting women’s economic empowerment. Therefore, it makes sense to collect both of them, both to increase the chance of detecting impact—in

GAAP if we had only looked at control of income, we would have found very little impact—and of understanding that impact. The challenge is then interpreting findings when multiple indicators do not move in the same (expected) direction. Conceptual frameworks, ideally translated into program impact pathways, provide some help reconciling results that appear to be conflicting. To the extent that project staff and beneficiaries can be involved in interpreting findings—e.g. baseline studies, monitoring or process evaluation (see for example, Rawat et al, 2013)—a more robust set of explanations can be identified. It might even be possible to test alternative explanations in the context of the project, therefore arriving at stronger conclusions and potentially also greater impact in the current project or the next one.

A shortcoming of asset-based measures is that it is difficult to set meaningful **targets**. We don't know whether there are thresholds in terms of quantity/value of women's asset portfolios, either alone or relative to men's, that are meaningful in terms of empowerment. More evaluations and meta-analyses might shed light on this question.

### **Recommendations for streamlined outcome measures**

In summary, we recommend including among the suite of outcome indicators used to assess program impacts on women's economic empowerment, the following:

1. Value and count of tangible assets (natural, physical, financial), and quantifiable measures of human and social capital: these can be disaggregated to include assets directly affected by the program, but should also include other types of assets (even if measured in a more aggregated manner)
2. Measures of joint and exclusive control of the assets by men and women within the household
3. Measures of participation and involvement in formal and informal groups

These indicators should be collected in a well-designed M&E framework that is able to track individuals and households over time, and, if used for impact assessment, will also be collected for a well-designed comparison group of households that do not participate in the program. Guidelines, toolkits, and questionnaires for collecting these data are publicly available.<sup>6</sup>

Collecting data on assets is important not only as a measure of the outcome of projects on women's empowerment, but also for understanding the situation of people as projects begin, so that their needs (and ability to participate in the project) are taken into account from the beginning, leading to more effective projects, overall.

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<sup>6</sup> See the Gender Asset Gap website, [www.genderassetgap.org](http://www.genderassetgap.org) and the GAAP toolkit, <http://gaap.ifpri.info/gender-and-assets-toolkit/>, for questionnaire modules designed to collect sex-disaggregated assets data, and the WEAI resource center, <http://www.ifpri.org/book-9075/node/9077>, for WEAI questionnaire modules on rights over tangible assets as well as questions on leadership in the community (social capital).

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