



# AFRICA GENDER INNOVATION LAB ETHIOPIA GENDER DIAGNOSTIC: BUILDING THE EVIDENCE BASE TO ADDRESS GENDER INEQUALITY IN ETHIOPIA

## INTRODUCTION

Ethiopia has made remarkable economic progress over the past decade, achieving high gross domestic product (GDP) growth and dramatically reducing poverty. Despite this success, current gender gaps show that challenges remain to realizing inclusive growth and the full potential of women's economic empowerment. In Ethiopia, women still lag men on several important economic indicators, including employment rate, agricultural productivity, earnings from self-employment, and wage income. Women continue to have poorer literacy and health outcomes, and fall behind on basic human rights, all of which matter for their livelihoods. Many of these gaps are deeply rooted in social norms and have important implications for broader poverty alleviation and growth on the national level.

While the Government of Ethiopia has already made significant commitments and investments aiming to close the country's gender gaps, new data offer an opportunity to generate critical evidence to strategically target these investments. For this reason, the Africa Gender Innovation Lab's (GIL) *Ethiopia Gender Diagnostic Report* provides innovative analysis on the root causes and drivers of gender inequality in Ethiopia. Using data from the latest round of the Ethiopia Socioeconomic Survey (2015-2016) and an established

## GENDER INNOVATION LAB

The Gender Innovation Lab (GIL) conducts impact evaluations of development interventions in Sub-Saharan Africa, seeking to generate evidence on how to close the gender gap in earnings, productivity, assets, and agency. The GIL team is currently working on over 60 impact evaluations in 21 countries with the aim of building an evidence base with lessons for the region.

The impact objective of GIL is increasing take-up of effective policies by governments, development organizations and the private sector in order to address the underlying causes of gender inequality in Africa, particularly in terms of women's economic and social empowerment. The lab aims to do this by producing and delivering a new body of evidence and developing a compelling narrative, geared towards policymakers, on what works and what does not work in promoting gender equality.

This policy brief is based on the *Ethiopia Gender Diagnostic Report*, which was prepared by a team of authors from the World Bank's Africa Gender Innovation Lab (GIL), comprised of Niklas Buehren, Markus Goldstein, Paula Gonzalez, Adiam Hagos, Daniel Kirkwood, Patricia Paskov, Michelle Poulin, and Chandni Raja.

statistical approach<sup>1</sup>, the report examines the country's gender gaps in employment, agricultural productivity, and income from self- and wage employment. It then proposes specific policy areas for the government to target in addressing the constraints faced by female workers, farmers, and business owners. The report's key findings and policy recommendations are discussed in the pages that follow.

## KEY MESSAGES

1. *Women in Ethiopia are less likely than men to work at all, and when they do work, they tend to work fewer hours per week. They are also less likely than men to work in the wage sector and more likely to work in non-farm enterprise.*

Women in Ethiopia are 17 percent less likely than men to work and, conditional on working, tend to work 4.4 fewer hours than men per week (see Figure 1).<sup>2</sup> Individual and household characteristics—such as age, status as household head, marital status, education level, recent illness, history of access to credit, wealth, household size, child dependency ratio, and geographical location—are fundamental in explaining women's decisions of whether to work and for how many hours. For instance, when comparing women and men with similar characteristics, substantially larger gender gaps in employment were revealed: Women were 29 percent less likely to work than men. Unsurprisingly, the differential amount of time men and women spend on income-generating activities has important implications for economic outcomes. Time poverty is a critical challenge for women as they tend to allocate relatively more time to domestic and household responsibilities than men do.

Women are also more likely than men to be employed in non-farm enterprise, constituting over half of the sector, and less likely to work in wage employment or agriculture, making up roughly 40 percent of the workers in each of these sectors. The role of skills in determining whether an individual is employed in wage or self-employment is particularly important. Fewer and less developed labor market skills imply that women are more likely to work in the informal than in the formal sector. Moreover, women with fewer job skills face a greater likelihood of unemployment, particularly in urban areas, and hold jobs that are less secure and more temporary. Less continuous employment means that women obtain lower income over a given period and have fewer opportunities for on-the-job training and skills development that could improve career outcomes in the long-term.

Narrowing the gender gap in labor market skills has important implications for not only women's economic outcomes, but also economic outcomes for society at large. Increases in female labor force participation and education levels lead to faster economic growth and the latter are also associated with decreases in child mortality and improvements in other maternal and child health outcomes. Furthermore, improved economic outcomes for women have been shown to increase women's decision-making power within the household and to consequently increase the amount of money spent on children's health, nutrition, and education. All of these individual channels yield higher overall levels of productivity and growth in the economy.

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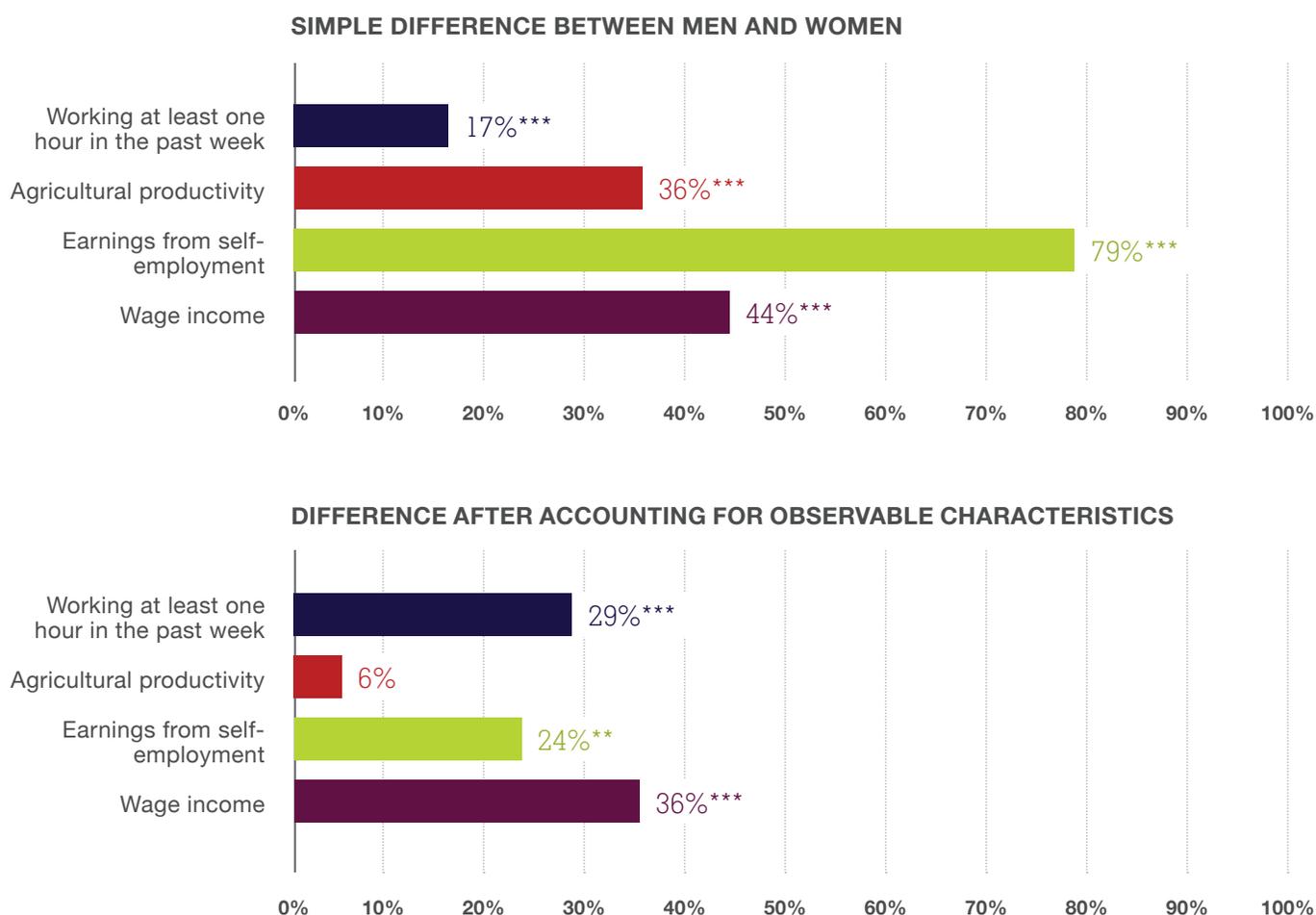
<sup>1</sup> The Oaxaca-Blinder decomposition is a statistical method that explains the difference in the means of a dependent variable between two groups by decomposing this gap into two parts: the endowment effect and the structural effect. The endowment effect explains the differences between men and women in terms of factors of production, such as years of experience, total inputs, or access to credit, for example. It refers to the differences in the quantities or levels of resources used in economic activities by men compared to women. The structural effect captures the return to resources, i.e. the difference in productivity that the men obtain compared with women who have on average the same years of experience or who use the same total amount of inputs. In other words, this part captures discrimination dynamics and other unobservable variables.

<sup>2</sup> These results are based on a nationally representative sample of 13,316 working-age individuals (aged 14 and above), 52 percent of whom were women.

2. Women’s agricultural productivity is on average lower than men’s due largely to differences in factors of production.

Female farm managers in Ethiopia produce 36 percent less per hectare than their male counterparts.<sup>3</sup> However, this gap significantly decreases to 6 percent when taking into account additional individual, household, and plot level characteristics that may explain the different productivity levels. This suggests that a significant portion of the gender gap in agricultural productivity stems from differences in these endowments. While a sizeable part of the gender gap can be explained by individual demographic characteristics, it is mostly attributable to differences in levels of factors of production between male and female farmers. In general, women have lower access to agricultural extension services and formal credit, they use fewer modern inputs, and they harvest a narrower range of crops. Narrowing the gender gap in agricultural productivity will depend on increasing women’s access to these factors of production. Additional details on these key differences in productive factors include the following:

FIGURE 1: GENDER GAPS IN EMPLOYMENT, AGRICULTURAL PRODUCTIVITY, AND INCOME FROM SELF- AND WAGE EMPLOYMENT



Note: The symbols \*/\*\*/\*\* denote statistical significance at the 10 percent, 5 percent, and 1 percent levels respectively.

<sup>3</sup> These results are based on a nationally representative sample of 2,907 farm managers, of whom 21 percent were women.



### ACCESS TO EXTENSION SERVICES

Female farm managers are 11 percentage points less likely to have attended extension programs than their male counterparts, and this difference widens the gender gap in agricultural productivity. Both supply and demand side constraints influence women's access to extension services. On the supply side, top-down agricultural extension models have often prioritized working with male over female farmers by targeting "model" or "progressive" farmers who are perceived to be more likely to adopt and use technological innovations. On the demand side, the lack of access to education, information, and complementary inputs weakens the ability of rural women to formulate and advocate for their needs in terms of technologies and services.



### ACCESS TO FORMAL CREDIT

Households of female farm managers are 9 percentage points less likely to have access to credit compared to households of male managers—another factor that widens the gender gap. Women have more limited access to credit largely because they are less likely to have ownership and control of physical assets that can be used as collateral. They also have lower levels of human and social capital, which make them less likely to be eligible for formal credit.



### PLOT SIZE AND CROP SELECTION

Female farm managers oversee an average of only 0.6 hectares, compared to an average of 1 hectare for male farmers. In addition, female farm managers grow a narrower range of crops than male plot managers. Notably, in line with the classic relationship between yield and land size, the smaller plots of land that women manage actually reduce the gender gap in productivity, with smaller plots tending to be more efficient, whereas the fewer number of crops that women farm widens the gender gap in productivity.



### ACCESS TO AGRICULTURAL INPUTS

Female farm managers use advanced agricultural inputs, such as fertilizers, pesticides, herbicides and fungicides at lower levels than male farm managers (by about 2 percentage points), which widens the gender gap. Women's more limited use of fertilizer could be due to the fact that fertilizer is a sizeable investment and is mainly sold in relatively large quantities, which is a particular limitation for cash-constrained women. Women also have more limited access to transport; so, in remote rural areas, where fertilizer is not usually readily available, women may have fewer opportunities to purchase it.

### 3. Women's earnings from self-employment and entrepreneurship are considerably lower than men's, owing mostly to differences in the levels of inputs they use.

On average, a female enterprise manager's monthly revenues are nearly 79 percent lower than a male manager's revenues, without accounting for differences in the levels of productive factors.<sup>4</sup> Once the factors that impact the

<sup>4</sup> These results are based on a nationally representative sample of 1,822 enterprises and 1,600 principal managers, 40 percent of whom were female.

productivity of an enterprise are considered, the gender gap in revenues decreases to 24 percent. Interestingly, these results indicate that the gender gap in total monthly revenues is mostly determined by differences in levels of productive factors, rather than differences in returns to those factors. In other words, if women were able to use the same level of inputs as men, the gender gap in revenues could significantly diminish. More information on the drivers of the gender gap in income from self-employment follows:



#### TIME SPENT ON BUSINESS ACTIVITIES

The fewer number of hours women spend on self-employment widens the gender gap in earnings. Each extra hour spent on the business per week is estimated to increase monthly revenues by 1 percent. Fewer hours dedicated to working in self-employment for women (17 per week, compared to 23 for men) could be due to a number of different factors, including competing domestic responsibilities and an inability to work during certain hours (e.g., after dark) due to safety concerns.



#### ACCESS TO HIRED LABOR

Women managers employ an average of 0.3 fewer employees than male managers, which contributes to the gender gap in earnings. Men also benefit more from an increase in the number of employees, with each additional employee contributing to an increase in monthly revenues of 4.5 percent in enterprises managed by a man and 3.6 percent in enterprises managed by a woman. The smaller enterprise size observed for women may relate to women's more limited access to, and control of, finances. Moreover, women may have less enterprise training and weaker business support networks through which to grow their enterprises and manage a larger number of employees.



#### BUSINESS LICENSE

Female managers are less likely to operate enterprises with a license compared to male managers, thus contributing to the gender gap in earnings. Only 15 percent of women managed at least one enterprise that holds a license compared to 37 percent of their male counterparts. Women's lower likelihood of having a business license could reflect the fact that they lack the time and money necessary to acquire a business license or the knowledge and skills to navigate the bureaucracy.



#### ACCESS TO FORMAL CREDIT

Women are less likely to acquire credit for their enterprise than men (by almost 4 percent), and the quantity borrowed by women managers is about 50 percent less than for male managers. Interestingly, the results indicate that acquiring credit has a negative effect on revenues, but the quantity of credit borrowed has a positive impact. Ultimately, this suggests that the lower amount of credit that female managers obtain for their enterprises is too small to be meaningful and widens the gender gap.

4. Few characteristics, other than age, marital status, and education level, help explain why women earn less than men do from wage employment. Broader dynamics—including gender-based discrimination, women’s more limited access to technical training, and women’s higher prevalence in the informal sector—may contribute to this gap.

Women’s average hourly wage earnings are 44 percent lower than men’s hourly earnings in Ethiopia. In contrast to the gender gaps in agricultural productivity and self-employment earnings, when accounting for the differences in productive factors, the gender gap in hourly wages only narrows slightly, to 36 percent. In this case, there are fewer specific, observable factors that determine differences in wages between male and female workers, other than demographic characteristics—such as age and marital status—and education level. Moreover, a large proportion of the gap is attributable to unobserved characteristics that were not included in the analysis—either because they are difficult to measure or because it is unclear which characteristics should be measured. The following section provides additional detail on the role of certain characteristics in influencing wage income:



#### AGE AND MARITAL STATUS

Age has a positive impact on wages, and the difference in the average age of male and female employees is about 5 years, significantly widening the gender gap. At the same time, marriage has a positive impact on earnings. The difference in marriage rates among male and female workers—65 percent of the male workforce is married compared to 45 percent of the female workforce—also widens the gender gap. Being widowed or divorced has a positive effect on earnings and, given that only 6 percent of male workers are widowed or divorced, compared to 22 percent of female workers, this narrows the gender gap.



#### EDUCATION LEVEL

Having a diploma or university degree positively affects the hourly wage earned by individuals. In Ethiopia, having a university degree, regardless of whether it is a bachelor’s or a graduate degree, can increase the hourly wage by nearly 50 percent compared to individuals who have only completed secondary education. Having a diploma or a certificate increases the hourly wage by around 20 percent compared to those who have only completed their primary education. While more women have diplomas (22 percent of women compared to 12 percent of men), fewer women have university degrees, with 11 percent of women and 20 percent of men having at least a bachelor’s degree. The difference in diplomas and certificates closes the gender gap meanwhile the difference in university degree widens the gender gap.



## UNOBSERVED CHARACTERISTICS IN THE GENDER WAGE GAP

The unexplained component of the wage gap could be attributed to three main dynamics, which are difficult to pinpoint based on observable characteristics: 1) gender-based discrimination, 2) access to technical training and skills development, and 3) informality, as discussed below:

- **Gender-based discrimination:** There exists a gendered division of labor in traditional Ethiopian subsistence-based agriculture. It is reasonable to expect the norms and tasks associated with this gender division to be transferred in some form during the shift toward non-agricultural wage work.
- **Access to technical training and skills development:** Women frequently have less technical training and participate less in skills development compared to their male counterparts. Women may also be trained in the less lucrative professions or industries that are traditionally available to women. Given the importance of human capital and labor market skills for determining wages, these factors are likely to play a role in explaining women's lower earnings.
- **Informality:** Women are more likely to work in the informal sector than to earn a formal wage in either the public or private sectors: 34 percent of women in Ethiopia work in informal wage employment compared to 13 percent of men. Since wages in the informal sector are usually lower than in the formal sector, this difference could account for a part of the gender gap.

### 5. Gender norms lead to behaviors that affect women's economic outcomes.

Gender norms, or shared beliefs about how women and men should behave, influence women's preferences and actions, and in turn, their economic outcomes, in four important ways: 1) marriage and childbearing, 2) assets, including land, 3) intra-household dynamics, and 4) work and self-employment. First, marriage and childbearing often occur early in life, and childbearing constrains young women's employment. Second, women own fewer assets than men, owing to the practices and beliefs about who owns marital assets and the allocation of assets upon divorce, which have tended to favor men. Third, women and girls do the majority of domestic work, which can impede opportunities for income generation or employment. Lastly, women's internalized beliefs about appropriate work for women or women's abilities, as well as discrimination, contribute to gender gaps in economic outcomes. Notably, two recent legal changes in Ethiopia—the Family Code of 2000 and the Land Registration Act of 2003—have begun to shift women's social and economic positioning and may influence the gender gaps identified in the report.

## POLICY PRIORITIES

Realizing women's potential in agriculture, entrepreneurship, and wage employment will be necessary to addressing Ethiopia's most pressing development priorities and achieving equality for women. To continue its progress toward inclusive growth, Ethiopian leaders should consider the following policy priorities, informed by the report's comprehensive analysis on the drivers of gender gaps, to overcome the obstacles to women's economic empowerment.



- **Alleviating time constraints for women by providing services and interventions to reduce the time burden posed by household duties.** Such interventions could make more time available for women to dedicate to other productive activities and contribute to closing the gender gap in employment and earnings.
- **Promoting educational opportunities, as well as job skills development through vocational and technical training.** Giving women and girls the opportunities to advance their education, develop their skills, and possibly cross-over into more lucrative male-dominated sectors could help narrow the gender gap in employment and earnings.
- **Expanding access to customized agricultural extension services for female farmers.** Agricultural extension services could play a considerable role in closing the gender gap in agricultural productivity if they target women on a larger scale. They could also tailor their interventions to focus on the productive factors widening the gender gap in productivity, such as use of agricultural inputs.
- **Increasing women's access to key inputs in agriculture and entrepreneurship.** For female farmers, boosting women's access to fertilizer and pesticides, and for female entrepreneurs, increasing access to hired labor and a business license, would substantially reduce the gender gaps in productivity and earnings.
- **Improving women's access to credit, and especially to mid-sized lending products, when they often lack access to enough collateral to be considered "creditworthy".** GIL evidence suggests two key approaches could work in making women more creditworthy: the first is building women's assets (e.g. land, through co-titling in land registration), and the second is developing innovative lending products that use unconventional, non-asset-based forms of collateral. These types of interventions could enable women to access credit at levels that would enhance their productivity and earnings in agriculture and self-employment.
- **Tackling gender norms and institutional constraints that limit women's economic empowerment.** Entrenched gender norms and institutional barriers underlie many of the key drivers of the gender gaps identified in the report. Recent legal changes, however, have already shown promise in beginning to shift norms in marriage, childbearing, and asset ownership.

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