It is a stylized fact that African women farmers achieve lower yields, as measured by the value of output per unit of land, than their male counterparts. Another common empirical observation is that smaller farms produce more output per acre than larger ones. Given that African women on average farm smaller plots than men, the finding that women achieve lower yields per unit of land begs explanation. Smallholder farmers face a number of pressures on their land and thus their livelihoods. Globalization and increased urbanization have increased worldwide demand for farm products. This pressure, along with increased population and lack of sufficient non farm job opportunities, has increased demand for land, sometimes in the form of large foreign acquisitions (land grabs), which make the situation of smallholder farmers even more precarious. In this context, it is important to understand the impact of farm size on output and, given the large number of women farmers in Africa, explore whether there are differences across gender.

Mwangi wa Gĩthĩnji, Charalampos Konstantinidis, and Andrew Barenberg examine these issues in the Kenyan context using a newly available national data set, the Kenya Integrated Household Budget Survey for 2006. Using a series of econometric models, the authors explore whether there actually is a difference in output per acre between men and women farmers. The authors find four key results. The first is that the inverse relationship between land size and output per acre holds even when controlling for the gender of the primary farmer. Therefore, policies that facilitate land concentration may result in lower overall agricultural land productivity. The second finding is that a woman-controlled farm does not result in a lower output per unit of land once we account for the likelihood of producing market-oriented crops.

The third key finding concerns the roles of soil, slope, inputs, and crop choice in the context of rain-fed agriculture. The authors find that soil and slope are key determinants of productivity; however, their “statistical significance” disappears when crop choice and fertilizer use are also taken into consideration. This leads to the last finding: the differences in men and women’s productivity are largely determined by differences in crop choice. Wa Gĩthĩnji, Konstantinidis, and Barenberg present some hypotheses that may explain their results. One hypothesis is that if households of women farmers are less able to access credit or insurance markets than male farmers’ households or are food insecure, they may choose to produce subsistence crops despite their lower returns in order to lower the risk of price shocks. In this case, policies that reduce these risks – such as food assistance, credit or insurance interventions, or food price stabilization – could increase women farmers’ participation in cash-crop production and hence, overall productivity.

Alternatively, it is possible that women farmers might wish to produce market-oriented crops just as much as men farmers but are discriminated against in access to cooperatives and input and output markets. Policies to encourage women’s participation in the cooperatives could have an important impact in increasing women’s farm productivity. Finally, in the absence of marketing structures such as cooperatives, or farm-gate purchases by merchants, a gendered division of labor within the household may restrict women’s ability to engage in the additional work of marketing produce successfully. This problem may point to the need to create structures that allow women to access markets. Such structures could include new kinds of producers’ cooperatives that focus not on the traditional cash crops but rather on assisting farmers in general, and women specifically, in getting their products to markets.