



Tropentag, September 17-19, 2018, Ghent

“Global food security and food safety:
The role of universities”

African Gender Yield Gaps: Things We Should and Shouldn't Change and the Evidence to Differentiate

PAIGE MILLER¹, KAI MAUSCH²

¹*University of Wisconsin-River Falls, Sociology, Criminology and Anthropology, United States of America*

²*The World Agroforestry Center (ICRAF), Kenya*

Abstract

While women comprise 30–80% of the agricultural labour force in sub-Saharan Africa (SSA), their yields are typically 20–30% less than men's, due predominately to lower resource allocation. Given that many countries in SSA are also facing food shortages, closing this gap by increasing women's yields has significant ramifications. One approach to improving women's production, thereby increasing food availability and possibly reducing global food insecurity, is encouraging the adoption of improved seed varieties.

Through a critical review of the literature discussing the extent and causes of gender yield gaps in agriculture, we argue that in order to accomplish this, not only will seeds need to be appropriate to women's needs, but women's non-farm commitments and time demands should also be addressed. The latter is especially relevant when considering evidence that farmers' efforts might be the primary determinant of observed yield differences rather than improved seeds alone. Indeed, a randomised control trial by Bulte et al. (2014) attribute the main yield difference between local and modern varieties to farmers' knowledge of growing modern varieties, which leads to changes in behaviour consistent with expectations of improved outcomes.

Applying a gendered lens to these results, female farmers' domestic responsibilities and agricultural and economic outcomes are intertwined through the relative efforts they can dedicate to each task. A woman's ability to cultivate a plot of land may be impeded by the trade-offs required, particularly in terms of available time and energy. Furthermore, if women redistribute their efforts from other duties or livelihood strategies, this will have latent consequences that should be considered. Rather than targeting women with approaches to adoption similar to the one used for men, tailoring technologies to account for women's responsibilities is more likely to improve output, without overburdening them. This may not lead to equal productivity but might be the optimal outcome given the trade-offs.

Keywords: Extension approaches, food security, gender, labour trade-offs, yield gaps