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Gender gap in rice productivity: Micro-evidence from Myanmar

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Abstract

Gender equality in agriculture is critical to ensuring food security and economic development. Numerous studies have estimated the gender gap in agricultural productivity in many developing countries. The magnitude of the gender gap in crop productivity in Myanmar has not been evaluated in the literature. This article provides empirical evidence of the gender gap in rice productivity in the Ayevarwady Delta Region, Myanmar using a detailed gender-disaggregated household and plot-level survey dataset (2014) from the IRRI rice project. This article investigated the limitations of existing literature in three different ways. First, this study used regionally represented crop-specific micro-level data. Second, the study separately estimated the gender gap in dry and wet seasons to address seasonal variation, and considered the heterogenous effects of marital status and locational variation. Third, this study also assessed jointly-managed plots, which are generally excluded in most previous studies. The Oaxaca-Blinder mean decomposition approach was used to identify the causes of gender differences in monsoon and summer paddy productivity. Our empirical findings show that female managers are 7.1% less productive than male managers, particularly in monsoon paddy production, after controlling for observed factors; however, the magnitude of the summer yield gap (2.79%) between men and women is small and insignificant. The structural effect (95.77%) rather than the endowment effect (4.37%) statistically explains the gender gap in monsoon paddy productivity, suggesting that despite having equal inputs access, men and women would have different productivity levels. Joint managers are $7.04\,\%$ more productive than female managers and 4.25 % more productive than male managers, particularly in summer paddy production. It shows that seasonality affects gender productivity disparity. The results of marital status heterogeneity show that divorced women account for a large portion of the productivity differential among non-married women managers. Initiatives to eliminate the gender gap in rice yield in Myanmar should pay attention to the unique requirements and obstacles women encounter throughout different seasons and tailor their interventions accordingly.

Keywords: Agricultural productivity, decomposition, gender, Myanmar, rice

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