Equality of Opportunity in Food Security and Basic Household Incomes on Sub Saharan Africa Agricultural Irrigation Schemes

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Abstract

Underlying inclusive growth and poverty reduction aspirations, major components of the UN’s sustainable development program, is the notion that all should have an equal chance of enjoying such advances and there is a need for measures that accommodate such aspirations. In promoting higher crop yields in household farms, Sub-Sahara African irrigation schemes have facilitated greater diversity in their income sources, which has played a key role in advancing household food security and poverty reduction in the region. However, since women are frequently less educated than their partners and have additional household obligations, their opportunities for off-farm work are more limited. In such cases, husbands work off farm, leaving wives to manage the farm as the de facto household head which can complicate the units decision making process. This situation can be construed as an equal opportunity issue wherein the extent to which household types defined by their scheme location and household decision making structure predicament or circumstance influence the outcomes of access to, or command over, land and crop based incomes. When equality of opportunity prevails, the equal chances principle dictates that outcome distributions of different circumstance types be identical. However, the significant differences in incomes across household types noted in Bjornlund et al (2019) suggests that this may not the case. Non the less assessing progress toward the ideal state is of interest from policy, social evaluation and academic perspectives. This study introduces new methods for measuring the extent of distributional differences and assessing progress toward the equal opportunity state. Using 2014 and 2017 data from four Zimbabwean and Tanzanian irrigation schemes, the results indicate that, although there has been a deterioration in equality of opportunity in access to land, differences across circumstance types of crop based income distributions have diminished over the period, revealing significant progress toward the Equal Opportunity goal in that dimension.

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