

Organic revolution: Cotton and its impact on poverty, inequality and sustainability in Tanzania

Ledermann, Samuel (2012)

Abstract: With organic consumption booming, proponents of organic agriculture argue that it presents a viable development alternative for African farmers that were sidestepped by the Green and Biotechnology revolutions. While ecological and human benefits of organic agriculture are better known, scholarship is lacking on the socio-economic impacts of organic export production on certified and non-certified farmers in Africa. Positioning organic agriculture as an innovation, this dissertation addresses critical omissions by asking: What impact does the Organic revolution have on poverty, inequality and sustainability? It draws on and contributes to bodies of literature on Agricultural Development and Inequalities in Africa, Agricultural Sustainability, and Multidimensional Poverty. Based on a survey of 122 organic and conventional cotton farmers in Meatu District, Tanzania, organic agriculture's potential as a pro-poor development intervention is evaluated. Quantitative analyses were coupled with participatory econometrics, which included focus groups and semi-structured interviews during follow-up visits. Main findings include organic farmers owning on average larger farms and being wealthier compared to their conventional counterparts. Lower levels of human capital were not identified as a barrier towards the diffusion of organic methods, which are traditionally more labor- and knowledge-intensive compared to the capital-intensive nature of previous agricultural revolutions. Lack of access to land was a key reason the poorest conventional farmers were unable to join. Organic farmers on average had lower prevalences, breadths and depths of poverty. Unidimensional and multidimensional poverty analyses showed that the intercropping of mungbeans - introduced into organic farming for its nitrogen-fixing properties - had a positive impact on lowering inequalities between organic and conventional farmers due to widespread adoption by both groups. The dissertation makes significant empirical contributions by providing a comparative study of organic and conventional farmers in sub-Saharan Africa, evaluating who becomes an organic farmer, and measuring the impact of organic agriculture on poverty, inequality and sustainability. These findings have important implications of the potential for the Organic revolution to act as a viable pro-poor development alternative.