"Price signals and supply responses for staple food crops in SSA"

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January 2016

Abstract:

Several studies have focused on estimating the supply response of farmers in Sub Saharan Africa. This literature has used a variety of approaches and has generally concluded that price elasticities of supply were low or very low. However, only a few analyses have gone beyond estimating the aggregate supply response for the sector as whole or the specific case of cash crops. In most cases, data scarcity especially on producer prices has been the main limiting factor. In this paper, we revisit this question focusing on the supply response of main staple food crops in selected Sub Saharan African (SSA) countries. We use an innovative dataset recently developed by FAO's "Monitoring and Analysing Food and Agricultural Policies" (MAFAP) programme which provides prices at the producer, wholesale, and border levels for selected value chains. Using dynamic panel techniques, we are able to test how acreage, production and yields respond to price signals and other non-price factors over the recent food price crises (2005-2013). We observe that farmers producing staple food crops react to real price signals, even if with a limited intensity. Moreover, our results suggest that direct price incentives arising from border protection and government intervention in domestic markets and price shocks at the border are more important than macroeconomic policies in influencing farmers' decisions. We also show that omitting marketing costs from the supply response function leads to underestimation of the price elasticity. Conversely, using wholesale instead of farm gate prices as proxy for producer prices leads to overestimation of the price elasticity.