An error corrected almost ideal demand system for major cereals in Kenya

Nzuma, Jonathan Makau; Sarker, Rakhal

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Abstract

Despite significant progress in theory and empirical methods, the analysis of food consumption patterns in developing countries, particularly those in Sub-Saharan Africa (SSA), has received very limited attention. An attempt is made in this article to estimate an Error Corrected Almost Ideal Demand System for four major cereals consumed in Kenya employing annual data from 1963 to 2005. This demand system performs well on both theoretical and empirical grounds. The symmetry and homogeneity conditions are supported by the data and the Le Chatelier principle holds. Empirically, all own-price elasticities are negative and significant at 5% level and irrespective of the time horizon, maize, wheat, rice, and sorghum may be considered as necessities in Kenya. While the expenditure elasticities of all four cereals are positive, they are inelastic both in the short run and in the long run. Finally, wheat and rice complement maize consumption in Kenya while sorghum acts as a substitute. Since cereal consumers have price and income inelastic responses, a combination of income and price-oriented policies could improve cereal consumption in Kenya.