Abstract

This study is part of the ASARECA regional Food Price Trend Analysis and Policy Options for Enhancing Food Security project being implemented in Tanzania, Kenya, Uganda, Ethiopia, and Rwanda. It contains preliminary highlights of the ongoing activities and the expected outcome. The paper analyzes local food price movement to generate scientific evidence for policy decision making process based on the link between prices and food security; because prices guide decisions for and economic activities of agents along the food value chain. The paper applies the fundamental principle of price transmission, i.e the Law of one price (Baltzer, 2013) represented as $|Pw -Pd| \leq t$ where Pw and Pd are are the prices of a commodity on the world market and the domestic market respectively and t represents the transaction costs associated with importing or exporting the commodity. In addition, the paper studies price transmission between different spatial local markets within the country. However, it is important to note that regardless of the markets under consideration the gap between the international and the domestic prices of a commodity or between spatial markets in the country are not greater than the transaction costs. The common food price transmission analysis is sub divided into two main types – horizontal and vertical analysis. Much of literature to-date has focused on modeling vertical price transmission from the farm to the retail sector, while horizontal price transmission looks on markets shocks that are transmitted to related markets at different location. This paper applies the latter in examining the price transmission of three commodities, i.e. maize, rice, and beans in six selected markets by looking at the effect of prices in one market prices to another. This is measured in terms of the transmission elasticity, percentage change in the price in one market given a 1 percentage change in the price in another market. We start with the simple case in which the assumption is that markets are perfectly competitive; whereby the product is homogeneous, meaning there is no variation in quality; traders are numerous and small so that none of them has market power; traders have perfect information; trading occurs instantly; there are no trade taxes or other policy barriers to trade, and there are no transportation or transaction costs. The studied markets on few selected markets such as Dar es Salaam, Mbeya, Morogoro, Rukwa, Arusha, Iringa and Shinyanga. This study will apply the vector error-correction model (ECM) to examine the relationship between world food prices and domestic food prices in Tanzania that will generate evidence based policy responses to the food price increases, volatilities and food   security.