

Supply response of Rice: a case study of Mwea Irrigation Scheme

Abstract:

This study evaluates both the price and non price determinants of rice supply in Kenya. Available statistics from the Ministry of Agriculture indicates that rice supply is on the decline. If this continues, it poses a threat in the country's food security. Arising from this threat, the study sought to establish the response of Mwea rice to its various determinants. The study used time series data for the period 1988 to 2007 from the Mwea irrigation scheme in Kirinyaga County. Data on rice from the surrounding out growers was also included. The data for rice supply and prices was obtained from the Mwea Rice Mills (MRM) and Mwea Rice Growers Multipurpose Mill (MRGMM) who are the largest rice millers within Mwea region. The study used regression method to examine the effects of prices of Mwea and imported rice, water availability, rainfall, civil unrest, presence of the National Irrigation Board and real GOP on the supply of rice. The study revealed that own prices were significant in determining the supply of rice. The elasticity of rice supply to own prices is 1.79. Rice is also responsive to rainfall. The elasticity of rice to rainfall was found to be 0.47. Rice was found to be responsive to acreage and the elasticity in this case was 0.82. The study found that farmers would be better off selling their produce to the free market since they fetch better prices than through the NIB. To increase rice supply, the study recommended that through the NIB, new schemes should be developed in upper catchments areas that record high rainfall.