

Effect of Fertilizer Consumption in Nigeria and Rate of Naira Exchange to the US Dollar on Sorghum Acreage between 1960 and 2006

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ABSTRACT The effect of aggregate fertilizer consumption ('000 metric tons) and the rate of Naira exchange to the US dollar on sorghum acreage between 1960 and 2006 were investigated. Various secondary data used were analysed using cointegration techniques and error correction modelling. Results indicate that fertilizer consumption and US dollar rate were well cointegrated with sorghum acreage although fertilizer consumption did not exhibit any strong relationship with sorghum acreage when US dollar rate was included in the cointegrating model. There was no associated error correction model and there was no indication of any kind of granger causality. This means that long-term neutrality of change does not exist, only short term dynamics is observed. It really shows that policy instruments with respect to the variables under study were not effective during the period under study. It also indicates that policy instrument alone cannot adequately correct for the temporary shocks to sorghum acreage. Therefore, an integrated approach and networking between agencies and participants in the commodities market is advocated and this will ensure food sustainability and the achievement of millennium development goals.