Food security in Mali

An econometric estimation of cereals demand using the AIDS and QUAIDS models.

Fousseny Togola |Agricultural Economics Engineer

Email: fouss3togola@gmail.com ftogola@enameknes.ac.ma

Phone : +223 73404757

Abstract

Food security is a major issue in Africa and especially in Mali. Despite enormous efforts by the State, in 2015, 25% of Malians were food insecure.

The objective of this study is to analyse the behaviour of Malian consumers for basic commodities, particularly cereals (corn, millet, rice, sorghum).

To achieve this goal, an econometric analysis was conducted using the AIDS and QUAIDS model under STATA software.

The findings showed that there is no difference between the two models.

The analysis of own price elasticities showed that cereals have inelastic demands on price. Let an own price elasticity of -0.035 for maize, -0.717 for rice and -0.186 for sorghum.

As for the cross-price elasticities, the findings showed that cereals are complements. This makes the demands inelastic to price. Indeed, we have a complementary relationship between maize and millet (-0.179), maize and rice (-0.195 and -0.368), maize and sorghum (-0.117 and -0.273).

In relation to income, the findings showed that maize is a necessary commodity with a value of 0.53. Rice and sorghum are luxury commodities with income elasticities of 2.2 and 1.29, respectively. Thus, an increase in consumer income would result in more consumption of these products. In practice, this behaviour is more characteristic of rural households than urban ones.

Finally, the Malian State must continue its efforts to help consumers fight food insecurity and achieve a certain level of wellbeing.

Keywords: cereals, demand, food security, AIDS and QUAIDS, Mali.