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Can Sub-Saharan Africa Become Food Self-Sufficient? Supply Response Analysis of Sunflower Oil Producers in Tanzania

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Abstract

There are many arguments that, increasing food self-sufficiency in sub-Saharan Africa (SSA) could reduce the high food price escalations which are often related to the increasing demand and importation of food commodities. In Tanzania, as in most SSA countries, edible oil crops production has been among the most vibrant activities, as there has been rapid expansion in the production of oil crops with high protein content, such as soybean, groundnuts, rapeseed and sunflower seeds. These crops are used largely for direct oil consumption, with their residues used as animal feed. Currently, annual edible oil demand is around 400,000 tons, a figure that is increasing at a rate of 3 % annually mainly because of population growth and increased health concerns. Current data shows that domestic production of both factory and small-scale extracted edible oils contribute to about 40 % of the national edible oil requirement while the deficit is imported. However, among the edible oil seeds, sunflower subsector dominates the supply of edible oil. In this study, an attempt has been made to examine the supply response of sunflower edible oil sub-sector against imported palm oil by using the Nerlovian partial adjustment model. Findings indicate, that the short-run price elasticities for sunflower oil and palm oil were -0.0028 and -0.396, while the long-run elasticities were -0.0045 and -0.64, respectively. On the other hand, short and long run elasticity for farmer income were 5.54 and 8.99, respectively. The speed of adjustment of per capita sunflower edible oil consumption was relatively high with 61.4 % per period. This high adjustment perhaps indicates that Tanzania sunflower edible oil sub-sector, with its predominantly smallholder farmers for raw material production, and small and few medium oil processors, may not be having enough capacity in terms of resources and technology to immediately increase sunflower edible oil production to self-sufficient level when the economic milieu improves in their favour. This calls for the Tanzania Government to review the tax policy on the imported agricultural technologies and other materials which increase costs for farmers and processors. This could enhance to achieve her self-sufficient endeavour.

Keywords: Self-sufficiency, sunflower edible oil, supply analysis, Tanzania

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