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## Food price elasticities of demand and choice: Implications for food and nutrition status in Tanzania

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### Abstract

Malnutrition in all its forms is still prevalent in Tanzania, and its devastating health outcomes can not be overemphasised. Among the underlying causes of malnutrition are unhealthy food choices driven by food environment aspects such as availability, accessibility, food prices, and affordability. Interventions that target to influence these aspects could result in the improvement of food choices and ultimately food and nutrition status. However, with price volatility, the realisation of such an impact is jeopardised, pointing to a need for exploring how consumers substitute foods across different food groups as prices fluctuate. Understanding such consumption patterns could provide important information necessary for designing effective food and nutrition interventions. A multivariate regression analysis was applied to estimate the own and cross-price elasticities of demand for cereals, fruits, vegetables, fats, meat, sugar, milk, and roots and tuber foods. Data was collected from 567 consumers, randomly selected in Ilala and Mkuranga districts, in Tanzania. Results indicate all food groups exhibited a negative and less than one own-price elasticity, implying that price changes have a subdued effect on the quantity demanded, underscoring the inelastic nature of consumer demand for food. However, the levels of inelasticity varies among the food groups; consumers have a relatively greater sensitivity to price fluctuations in fruits, vegetables, and meat compared to other food groups. Furthermore, results of cross-price elasticities show both distinct complementarity and competition between food pairs. Food groups such as sugar and milk, fruits and vegetables, meat and fruits, and grains and vegetables exhibited complementary relationships. Also, food group pairs that indicated a competitive relationship include vegetables and fats, fats and meat, grains and fats, and cereals and fats. The nature and degree of consumer responsiveness to price changes suggest a compromised food and nutrition status. It is recommended that policy attention should be directed towards the relatively more price elastic foods, such as fruits and vegetables which are considered healthier but are usually less consumed and compromised in case of economic shock, and more inelastic foods like sugar and fats which are considered unhealthy

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