PRICE AND INCOME ELASTICITIES OF DEMAND FOR RICE IN SRI LANKA

K.T.I. Wijewardana and L.P. Rupasena

Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyan kulama, Anuradhapura, Sri Lanka

Knowledge of impact of price and income changes on rice consumption in Sri Lanka is lacking and it is necessary for addressing the current problems of high rice prices and surplus of paddy production in the country. Hence this study was carried out to estimate price and income elasticities of demand for rice in Sri Lanka utilizing the secondary data collected from Household Income and Expenditure Survey in 2012/2013. The data were analyzed using double log demand function. The study found that the own price, cross price and income elasticities of demand for rice were -0.73, 0.33 and 0.052 respectively showing inelastic demand with respect to changes in rice price, wheat flour price and income. This indicates that consumer response to change either price or income is limited. Inelastic price demand means availability of limited substitutes for rice. This study found that bread is not the substitute for rice. Due to the nature of inelastic price demand, increased rice prices lead to increase rice expenditure and country's inflation. Results also revealed that 7% shortage in rice supply to the market results in 10% increase in rice prices. Low income elasticity indicates that rice becomes an inferior good for higher income people who diversify food basket from grains to non-grain foods such as vegetables, fruits and fish/meat to obtain more protein and vitamin. This indicates the limited expansion of rice market in the future. Study found that population is the only major positive determinant in future rice demand showing that 1% increase in population results in a 0.7% increase in rice consumption. Study concludes that increased rice prices adversely affect the consumers while increased paddy production adversely affect the paddy farmers. Thus supply management policies such as maintaining buffer stock and increasing storage at farm level required for price stabilization and planning of paddy production in line with market demand is necessary to reduce the surplus production in the country. Study further confirms that agricultural policy in the country now should focus on promotion of diversification of paddy fields.

Keywords: Double log demand function, Income elasticity, Price elasticity, Rice, Sri Lanka