Economic Analysis of Household Food Consumption Expenditure Pattern at Residential Sectors in Sri Lanka: Evidence from Badulla, Kandy, Nuwara-Eliya and Ratnapura Districts

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Food consumption expenditure pattern is the key indicator in household behavior as food is the basic alimentary ingredient for every human being. The purpose of this study is to examine Household Food Consumption Expenditure (HHFCE) pattern and find out the factors that influence HHFCE in urban, rural, and estate sectors. For the purpose Household Income and Expenditure Survey (HIES) data collected for the period of 2016, 2012/13, 2009/10 and 2006/07 are used. Badulla, Kandy, Nuwara-Eliya and Ratnapura districts, which covers 13,881 households in all three sectors, were chosen as study areas. Multivariate Linear Regression Model (MLRM) adopted and used in four functional forms to select appropriate expenditure function for analyzing food expenditure pattern. Estimation technique depends on diagnostic tests of the model by analyzing an implicit expenditure function. Diagnostic tests used in all four models. Among the tested functional forms, double log is more suitable than other forms. However, this form suffers heteroskedasticity and non-normality of error. Hence, the Fixed Effect (FE) model and the Weighted Least Squares (WLS) method employed to estimate parameters. Results reveal that bread, meat, fish, coconut and milk food groups have a positive and significant impact on HHFCE in all sectors, while rice and income have positive and significant impact only in urban and rural sectors in these three methods. Pulses have a positive and significant impact in rural and estate sectors. According to all three techniques, expenditure in rice and meat increase urban sector HHFCE higher than other sectors, whereas expenditure on pulses, vegetables, fish and egg raises estate sector HHFCE larger than other sectors while expenditure in bread increases the estate sector HHFCE more than other sectors in OLS and FE techniques but expenditure on bread tend to increase urban sector HHFCE higher than other sectors only in WLS method. Further increase in monthly income increases urban sector HHFCE larger than other sectors. And increases in inflation negatively affect estate sector HHFCE more than other sectors.

Key words: Heteroskedasticity, Fixed Effects, Hausman test, OLS, WLS