

Effect of Price Changes on Household Food Security in the Rural, Urban and Estate Sectors in Sri Lanka

**Thamilini J.^{a*}, Silva K.D.R.R.^a, Jayasinghe-Mudalige U.K.^b,
Edirisinghe J.C.^b and Herath H.M.L.K.^b**

^a Department of Applied Nutrition, Faculty of Livestock, Fisheries and Nutrition

^b Department of Agribusiness Management, Faculty of Agriculture and Plantation Management Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka

*Corresponding author (email: tamil.1130@yahoo.com)

Abstract

People need reliable access to sufficient quantity of safe and nutritious food for an active and healthy life, which is commonly referred to as food security at the household level. This study was aimed to assess the key factors associated with household food security, with special focus to the effect of food prices in this respect, in the rural, urban and estate sectors in Sri Lanka.

Panel data were collected by means of a structured questionnaire-based household survey completed in two stages, namely *Phase I* (2013/14) and *Phase II* (2015/16), with over 3000 households covering all three sectors and the country. The state of household food security was determined using the ‘modified United States Department of Agriculture food security survey module’ and the household food consumption was assessed by means of “food consumption score” (FCS) and “household dietary diversity score” (HDDS). Dietary intake of the household was assessed by a single 24-hour recall, while the cost of a healthy food basket was estimated by using the information gathered through market surveys in respective geographical areas. Tobit Regression Analysis was applied in essence to assess the effect of food prices on household food security in relation to FCS.

The results show that FCS of households in all three sectors was decreased from phase I to II with the highest drop in urban sector (51.4% households) followed by 48.8 and 47.2 percent households in the estate and rural sectors, respectively. Similarly, the ‘dietary diversity’, evaluated using the HDDS, has been changed significantly over the study period by 40.5, 41.1 and 43.3 percent of households in estate, rural and urban sectors, respectively. This suggests that a household, in general, tends to consume a “less diverse diet” as time passes. In fact, the energy and nutrient intakes have also decreased in all three sectors over the time. Overall, the state of “food insecurity” increased from phase I to II with 51.8 % to 64.5 % in rural; 30.1 % to 36.7 % in urban and 64.0 % to 69.7 % in estate sectors.

In relation to the effect of food prices, the outcome of analysis highlights that the monthly household expenditure and the expenditure on food in all three sectors showed a significant increase over the study period. The lowest expenditure share on food was found in the estate sector followed by the rural and urban sectors. Further, the price of a healthy food basket has increased from phase I to II by about 10 to 14 percent in all sectors in concern.

The results from Tobit Regression Analysis suggest that the FCS is negatively correlated with the price of rice, wheat and meat. In fact, the effect of an increase in price of rice is nearly as twice as that in wheat and meat. Severity of effect of increase in price was highest and lowest in the urban and rural sectors. It can be suggested that the cost of food basket in all three sectors apparently forced households to reduce quality and quantity of food consumed. The households, in general, adapted to such changes in price by changing their consumption patterns from “less affordable” (i.e. high priced) foods to relatively “cheaper foods” or practicing various coping strategies such as burrowing money, eating low-priced foods and/or foods that they like less etc. It can be concluded that, given the inherent food habits, lifestyles and socio-economic environment pertaining to each sector, the urban poor, rural poor and estate sector populations in Sri Lanka are becoming vulnerable in relation to the effects of food price changes.

Key words: Food basket; Food consumption; Food prices, Food security