

Determinants of per capita fresh fish demand in Sri Lanka

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This research explores the determinants of annual per capita fresh fish demand in Sri Lanka and estimate the elasticity of them by using the Autoregressive Lag model based on Linear-Log functional form. The time-series data (1987-2016) for thirty years were gathered from the statistical reports of fisheries ministry of Sri Lanka, the data base of EDB, the statistical abstracts of Department of Census and Statistics, annual reports of Central Bank and economic and social statistics books of Central Bank. The annual per capita fish demand is a function of the consumers' income; own price (fresh fish price), price of substitutes (dried fish and chicken price) and one year lag value of per capita fish consumption. The prices of beef, pork, mutton, Maldive fish, canned fish, egg and milk have not shown significant impact on fresh fish demand. The estimated long run elasticity are as follows own price = -0.57, chicken = 0.70, dried fish = 0.42, income = 0.81. The fresh fish demand was inelastic for all the determinants in the model. That emphasizes fresh fish is a very important food item for Sri Lankans and they try to consume a relatively constant amount of fish disregarding in changes of the demand determinants. The income has the highest positive elasticity value and that implied continuous growth of income is the major determinant to increase per capita fish consumption. For long term income elasticity is decreasing from 0.83 to 0.73 during last decade that means income became more inelastic for fish demand over time. The fish has not close substitute hence all cross price elasticity values were less than one. During the last decade dried fish elasticity value has been gradually decreased while elasticity of chicken increased. That means substitutability of chicken for fresh fish increase over dried fish. The consumer has switched from dried fish to chicken as close substitute of fresh fish.

Keyword: demand for fresh fish, elasticity, income, cross price

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