

Impact of Unemployment on Food Security: Evidence from Sri Lanka

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Unemployment is becoming one of the main socio-economic problems in Sri Lanka, coupled with the economic recession. Unemployment results in an increase in the poverty rate of the country. Poverty leads to food insecurity. Food security is defined as all people having physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. Food security will ultimately achieve zero hunger, the second Sustainable Development Goal. The study investigates the impact of Unemployment and Food security in Sri Lanka. The study investigates the impact of Unemployment and Food Security in Sri Lanka using the Autoregressive Distributed Lag Model (ARDL) using Sri Lanka as the sample country for thirty years from 1991 to 2020. The data was collected on an annual frequency from CBSL. The results show a negative relationship between unemployment and food in Sri Lanka. The study concludes that when unemployment is higher, food security is lower. Level of education and macroeconomic economic factors are the mechanisms through which unemployment reduces food security. Lack of education reduces chances for employment. Further, low-quality jobs and macroeconomic conditions will reduce food security. Thus, policymakers need to increase education and job opportunities, ultimately increasing food security.

Keywords: *Auto Distributed Lag Model, Food Security, SDG goal 2, Sri Lanka, Unemployment*

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Unemployment is becoming one of the main socio-economic problems in Sri Lanka that coupled with the economic recession. Increased unemployment results to increase the poverty rate of the country. Poverty leads to food insecurity. Food security is defined as all people, always, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. Attaining food security will ultimately achieve, zero hunger which is the second Sustainable Development Goal.

Purpose
 The study investigates the impact of Unemployment and Food security in Sri Lanka.

Analysis
 Using R software, the two data sets were checked whether they were stationary or not and then bound test was done to check cointegration. From that we concluded that there is no cointegration between unemployment and cointegration. Finally, auto ARDL model was applied to find optimum lag values and to get the summary of best model and also correlation was tested.

Conclusion
 The study concludes that when the unemployment is higher, the food security is lower. Level of education and macroeconomic economic factors are the mechanisms through which unemployment leads to reduce the food security. Lack of education reduces chances for employment. Further, low quality jobs and macroeconomic conditions will reduce the food security. Thus, the policy makers need to take measures to increase the levels of education and job opportunities which will ultimately lead to increase food security.



Methodology
 The study investigates the impact of Unemployment and Food security in Sri Lanka using the Autoregressive Distributed Lag Model (ARDL) using Sri Lanka as the sample country for thirty years from 1991 to 2020. The data was collected on an annual frequency from CBSL.

Findings
 The generated results shows that there is a negative relationship between the unemployment, and food in Sri Lanka. We take the lag values which AIC value is minimum. $P=2, q=1$ (AIC=40.33). summary of best model was Adjusted R-squared: 0.9897 and P value is less than 0.005 and F-statistic is significant. It means even if there is no cointegration this model is significant. Also, last two years back food security index has significant impact on current index. All other lags are insignificant. Furthermore Correlation value was 0.2191076

