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## An empirical analysis of the effect of agricultural sector determinants on economic growth in Sri Lanka

## P. Anusha<sup>1\*</sup> and S. Vijesandiran<sup>2</sup>

- <sup>1\*</sup> Department of Economics and Statistics, Faculty of Arts, University of Peradeniya, Sri Lanka
- <sup>2</sup> Department of Economics and Statistics, Faculty of Arts, University of Peradeniya, Sri Lanka

## **Abstract**

The role of agriculture has been significantly emphasized in improving the living standard of the population and economic framework of any country. Rostow (1960) in his Stages of Economic Growth explained that agriculture is crucial for the "take-off stage" of a nation's economic growth and development. Agriculture has been an important sector in Sri Lanka which contributes 7.4% to the GDP, 25.5% of the total labor force, and 20.62% to the foreign earnings and Livelihood Avenue for 2.1 million households in Sri Lanka. The contribution of agriculture sector determinants food, forestry, fishery and livestock: to the GDP shows a declining trend during the last four decades. Therefore, this study attempts to examine the effect of these determinants on economic growth over the period of 1987-2019. Secondary data was extracted from the Central Bank of Sri Lanka. This study adopted econometric modeling to confirm the stationary, long run relationship, and short run relationship among the variables. The Augmented Dickey-Fuller and Phillips-Perron unit root tests were confirmed that all the variables are stationary only at I (0) and I (1) and ARDL (3,4,4,3,4) model. The Wald test found a co-integrating relationship between the variables under considered in this study. The findings of Auto Regressive Distributed Lag (ARDL) bound test shows that the food production, forestry have negative relationship, fishery and livestock have positive relationship with GDP in the long run. Even though all the explanatory variables have relationship with GDP, only livestock has statistically significant impact on RGDP at 5% significant level in the long run in Sri Lanka. The Error Correction version of the ARDL test discovered that food production, forestry, and livestock have a positive and significant short-run impact on RGDP. While economic growth can return to a long-run steady state at a rate of 35.75 % in each year following external shocks. As a result of this research, the Sri Lankan government should prioritize concentrating on several subsector variables in order to accelerate the country's economic growth. Hence, Sri Lanka needs efforts on agricultural; based structural transformation by adopting new technology to increase labour and land productivity, improving farm-market linkages, investing in value chains, and also generating off-farm employment to absorb excess labour in the rural areas. In addition, Sri Lanka needs to redouble her efforts to build sustainable agriculture food systems that are better able to withstand crises and shocks in the future.

**Keywords:** Agricultural sub sectors, Auto regressive distributed lag model, Economic growth (RGDP), Sri Lanka, Time series analysis

\*Corresponding Author: pathmakanthananusha94@gmail.com