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## **DOES THE LONG RUN ECONOMIC GROWTH BOOSTS THE CARBON DIOXIDE EMISSION? (WITH SPECIAL REFERENCE TO SRI LANKA)**

Langappuli S.S.\* and Gunasekara A.N.N.M.

Department of Economics, Faculty of Humanities & Social Sciences,  
University of Ruhuna, Sri Lanka  
langappulis@yahoo.com

### **Abstract**

The natural environment provides resources as inputs and absorbs unwanted by-products in the form of pollution and waste. Thus, current economic activities have led to a plethora of environmental problems. Economic growth aims for an increase in real GDP. To encourage a high rate of growth, every individual country implements development mechanisms based on their potential of natural resources. Human activity, which often leads to increased GDP by goods production and services, unquestionably produces CO<sub>2</sub> emissions. Therefore, with the increased production and consumption we can witness the costs imposed on the environment and these costs led to a significant issue for the living condition of the population not only for the current but also for the long-term perspective. Focusing on solutions to pollution; the main objective of this paper is to queering the link between continuously increasing carbon emissions and the growing economy in Sri Lanka. Validated secondary data of GDP per Capita and CO<sub>2</sub> emission for over the past six decades were analysed by the Unit root test along with the VAR Granger Causality test to investigate the long-term effect of the two variables. Further, the study also contemplates proving the general EKC of middle-income countries' theory for the Sri Lankan economy. The results emphasized that the long-run relationship of GDP per Capita significantly causal to the country's CO<sub>2</sub> emission. While the CO<sub>2</sub> emission to the atmosphere does not causal the GDP per Capita in Sri Lanka. According to the Environmental Kuznets Curve (EKC), scrutinized results showed that after US\$ 3000 GDP per Capita Sri Lanka about to experience composition and technique effect as a middle-income country. This research is a revelation of the theoretical and practical applications related to the green economy. In order to mitigate environmental degradation government should implement an efficient strategy to improve the quality of the environment sustainably.

**Keywords:** CO<sub>2</sub> emission, economic growth, EKC, cause and effect, green economy