Proceedings of the ISymRU 2021 Management and Economics: Oral Presentation

Productivity Changes of Major Agricultural Crops in Sri Lanka: A Comparison Among Main Countries in The World

Hatharasinghe H. K. A. P. 1 , Jayamanne D. N. T. 1, Athukorala W. 2

Abstract

Main objective of this study is to identify the productivity changes of tea, rubber, coconuts and rice in Sri Lanka over the last 5 decades (1970-2019). It also compares the land productivity with the top 10 countries that cultivate mainly those selected crops. Secondary data extracted from Food and Agricultural Organization (FAO) on cultivated area and the annual production for selected crops are used in the analysis. The study estimated 10 years averages of the productivity for selected crops and then average productivity changes between 1970-1979 and 2010-2019 are compared between countries for each crop. The results show that average productivity differences for tea, rubber, coconuts and rice are 1.18, 0.63, 1.14 and 2.23(000MT/ha) respectively for all countries. Estimated productivity growth rates for the same crops were found as 123.01%, 108.48%, 30.47% and 77.4% during the study period. When considering the country specific productivity changes, a significant variation could be found. The highest productivity growth rates for tea, rubber, coconuts and rice are recorded in Iran, Philippine, Papua New Guinea, Vietnam while the lowest growth rates were recorded in Japan, Nigeria, Vanuatu and Japan. The productivity growth rate of paddy and tea in Sri Lanka is 84.18%, 74.42% while the growth rate of productivity for rubber and coconut are 72.31%, 51.15 % respectively. This study also compares the productivity difference between developed and developing countries and found that productivity growth of developed countries is relatively higher than developing countries. Sri Lankan tea productivity growth rate is greater than Japan, Bangladesh, Indonesia and India out of ten countries. Among the top ten rubber producing countries, Sri Lankan rubber productivity growth rate is greater than five other countries. The findings of this study will help policy makers to understand the relative position of Sri Lankan productivity growth and take necessary action to boost agricultural productivity of above crops in Sri Lanka.

Keywords: Agriculture, productivity, comparison, Sri Lanka

¹ Post Graduate Institute of Humanities and Social Sciences, University of Peradeniya, Sri Lanka

² Department of Economics and Statistics, Faculty of Arts, University of Peradeniya, Sri Lanka

Corresponding Author: ayesha.hatharasinghe@yahoo.com