

Growth Performance of Rice Sector in the Present Scenario of Sri Lanka

Sandika AL and Dushani SN

*Department of Agricultural Economics and Extension, Faculty of Agriculture,
University of Ruhuna, Mapalana, Kamburupitiya*

Abstract

The Government is promoting the development of agriculture sector with the slogan of "Let us grow more to uplift the nation". This study was carried out to analysis the growth performance of rice sector, and to identify the appropriate model to predict the future trend of the sector. The study was done mainly on the basis of secondary data. The growth performance was analyzed by considering four variables 1. sown extent, 2. harvested extent, 3. total production and 4. productivity. The behaviour of these different variables was tested through scatted plot diagram with time. Based on the behaviour of the variable, different time series (TS) models were tested.

Sown extent and harvested extent did not show a strong relationship with time. The average sown extent and harvested extent recorded as 858.28 and 813.37 ha thousand, respectively. However the total production (thousand t) and productivity (kg per ha) have increased significantly with time. Therefore, the responsible factor to increase the total rice production was increment of the productivity. Cubic model was the most suitable to predict the total production and productivity which were $Y = 1557.82 + 173.52t - 11.17t^2 + 0.24t^3$ ($r^2 = 89.51$) and $Y = 2227.67 + 210.13 t - 11.19t^2 + 0.22t^3$ ($r^2 = 95.20$) respectively. In this context, it is possible to meet future demand for rice through increasing the land productivity by adopting the best field practices.

Keywords: model, production and productivity, rice