

Impact of Rainfall on Coconut Production in Sri Lanka

Faslim, M.P.M., Sivashankar, S. and *Sooriyakumar, K.

Department of Agricultural Economics, University of Jaffna, Sri Lanka

*Corresponding E-mail: ksooriyakumar@yahoo.com

The coconut industry is an essential component of Sri Lankan cooking, nutrition and rural livelihood and an important source of foreign exchange and employment generation for Sri Lanka. Coconut occupies 20 percent of Sri Lankan arable land and most of the coconut farms are operated by small scale farmers. There is considerable volatility in annual coconut production due to climatic factors. The uncertainties of coconut production affect domestic consumers, producers and the coconut processing industries. This study investigates the impact of rainfall on annual coconut production. For this study, secondary data on annual coconut production, extent of coconut cultivation and annual rainfall of all nine provinces of Sri Lanka from 2001 to 2016 were collected from central bank annual report. Fixed effect panel regression model for annual coconut production was developed. The result of this model shows that a 10 percent decrease in annual rainfall is associated with 3.7 percent significant drop in the annual coconut production. This study recommends that farmers should adopt water conservation practices such as cover crops and drip irrigation during the drought period and also policy makers can introduce a subsidy program to encourage farmers to adopt water conservation practices in coconut cultivation.

Keywords: Coconut Production, Panel Regression Analysis, Volatility