

AN EXPLORATION ON THE EFFECT OF CLIMATE CHANGE ON TEA PRODUCTION IN SRI LANKA.

(A Study on Eladaluwa Division, Badulla district in Intermediate Zone)

Rukshan Shyamal.S¹

Climate change has become a global concern due to its adverse effects on agricultural productivity. While there is scarce literature quantifying the effects of climatic change on Tea production with regard to particular fertilizer usage, climatic zones, and growth periods, Tea is the second most popular beverage consumed worldwide, and over 50 countries are economically dependent on the production of tea. It is a significant source of foreign exchange, employment generation, and food supply of Sri Lanka. The problem currently is the change in climate. It affects not only tea production but also the whole agri-food supply chain. Hence the aim of this study was to explore the effects of climate change on tea production and the possible solutions to minimize the effect. The study adopted a qualitative exploratory case study-based methodology. The target population was tea small holders in Badulla district of Sri Lanka. The sample size was 15 and was selected based on purposive sampling technique. For the purpose of data collection, respondents were interviewed using a semi-structured interview guide. Also, the data were analyzed using thematic area analysis technique. The findings of the study revealed that various types of climate events affect tea production, including changes in rainfall patterns, drought, pests and diseases, as well as a shift in the suitable growing periods. Mainly the data revealed that drought and erratic rainfall patterns create a significant impact on tea yield, which results in irreparable losses, since irrigation is rarely employed on tea plants. Finally, the study provides recommendations to minimize the effect of climate change on tea production including implementing water management strategies, promoting sustainable agricultural practices, increasing farmer education and training, utilizing more fertile land, and revamping the existing agriculture policies considering climate change into account. In conclusion, climate change poses a significant threat to the future of tea production in Eladaluwa Division and beyond. However, proactive measures such as continuous research, adaptation, and collaboration can help alleviate its effects and ensure the resilience of the tea industry in the face of ongoing climate challenges.

Keywords: *Climate Change, Tea Production, Rainfall Pattern, Sustainable Agricultural Practices, Agriculture Policies*

¹ Department of Economics, Faculty of social Science and Humanities, Rajarata University of Sri Lanka. rukshashamal530@gmail.com