

# IMPACT OF COVID-19 PANDEMIC ON AGRICULTURAL ACTIVITIES RELATED TO NATURAL RUBBER PRODUCTION IN KERALA

Phebe Joseph, Binny Chandy and M.D. Jessy

Rubber Research Institute of India, Kottayam-686 009, Kerala, India

Received: 31 May 2023

Accepted: 19 June 2023

Joseph, P., Chandy, B. and Jessy, M.D. (2023). Impact of COVID-19 pandemic on agricultural activities related to natural rubber production in Kerala. *Rubber Science*, 36(1): 36-47.

The COVID-19 pandemic wreaked many threats to sustainability of both the global and Indian agricultural sectors. To assess the impact of COVID-19 pandemic on plantation management activities related to natural rubber production in Kerala, an online/telephonic survey was conducted among the rubber growers through a well-structured questionnaire with a series of questions related to agricultural practices adopted during the period 2020-2021. A total of 300 rubber growers were interviewed based on stratified sampling with Neyman allocation method. Results of the survey indicated that restrictions imposed during the pandemic induced lockdown and the resultant shortage of labourers affected the functioning of agricultural activities in rubber plantations. Substantial heterogeneity in the impact of lockdown was found in small and large holdings with regional variations. During the initial few months of the pandemic, tapping was hindered in about 58 per cent of the smallholdings and in the entire large estates due to the unavailability of tappers. The delay in other plantation management activities like rainguarding, weeding and spraying also contributed to considerable reduction in production. Huge hike in expenditure due to delayed replanting operations of rubber was also observed. In order to overcome the negative impacts and to reduce the yield gap, both the small and the large growers modified agricultural operations in their own rubber plantations. This study gives a valuable insight to the resilience of rubber growers in the state, amid disruptions and adversities.

**Keywords:** Agricultural activities, Impact of COVID-19 pandemic, Rubber sector, Strategies to overcome the impact of COVID-19

## INTRODUCTION

COVID-19 pandemic impacted all the agricultural sectors globally and disrupted the agricultural value chain. In India, as elsewhere, the plantation sectors have been hit hard by the pandemic induced lockdown. India declared a three-week nation-wide lockdown from 24 March to 15 April 2020 during the initial phase which imposed movement restrictions on people, and most shops remained shut. Although the

lockdown was extended from 15 April till 3 May 2020, the plantation sectors were given conditional exemptions, enabling operations with 50 per cent workforce. Exemption was also given to activities such as farming, processing, packaging, sales and marketing in the plantation sector. Complete cessation of activities in plantation sector for a period of 21 days during the initial phase and subsequently operation with half of its worker capacity opened a whole set of issues