

**ECONOMIC, SOCIAL AND ENVIRONMENTAL FACTORS  
INFLUENCING RUBBER REPLANTING DECISIONS AMONG  
SMALLHOLDERS IN GOVINNA, KALUTARA DISTRICT**

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## ABSTRACT

Rubber is one of Sri Lanka's most important plantation crops, contributing significantly to the rural economy and export earnings. Smallholder rubber farmers play a vital role in sustaining Sri Lankan natural rubber industry. Replanting decisions are shaped by a combination of economic, social and environmental and understanding these elements is essential for improving replanting rates, enhancing productivity and ensuring the long-term sustainability and viability of smallholder rubber cultivation. However, many smallholders face challenges in making timely replanting decisions. The study is aimed to identify and analyze the key determinants that affect smallholders' willingness, readiness and capacity to engage in rubber replanting process in Govinna region in Kalutara District. A sample of 100 respondents were selected using a simple random sampling method and data were collected through a pre-tested structured questionnaire. The analysis was conducted using SPSS version 26 employing descriptive statistics and multiple regression analysis to explore the relationship between the variables. With an  $R^2$  value of 0.771, the regression model showed a high degree of explanatory power, meaning that these factors could account for 77.1% of the variation in replanting decisions with economic factors ( $p= 0.000$ ), social factors ( $p= 0.013$ ) and environmental factors ( $p= 0.000$ ) emerging as significant positive influence. The study concludes that enhancing access to credit, ensuring stable market circumstances, social support networks and environmental sustainability are important factors that influence smallholder rubber farmers' replanting strategies. Smallholders' participation in replanting can be greatly increased by strengthening financial support systems, raising awareness of replanting initiatives and offering technical training. It is anticipated that these findings would help policy makers and development organizations in formulated targeted interventions to promote sustainable rubber cultivation and raise the livelihoods of smallholder farmers.

**Keywords:** Descriptive statistics; Policy makers; Regression analysis; Rubber replanting; Smallholder farmers; Viability

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