

CHANGING DIMENSIONS OF INTERCROPPING IN THE IMMATURE PHASE OF NATURAL RUBBER CULTIVATION: A CASE STUDY OF PINEAPPLE INTERCROPPING IN CENTRAL KERALA

T. Siju, K. Tharian George and Radha Lakshmanan*

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

*Regional Research Station, Padiyoor, Kerala, India

Received: 18 June 2012 Accepted: 14 August 2012

Siju, T., George, K.T. and Lakshmanan, R. (2012). Changing dimensions of intercropping in the immature phase of natural rubber cultivation: A case study of pineapple intercropping in Central Kerala. *Rubber Science*, 25(2): 164-172.

Intercropping in the immature phase of rubber plantations had been the outcome of a major policy decision implemented in 1957 with the core objective of achieving self sufficiency in NR production. However, the priorities and strategies of intercropping have undergone important changes during the past five decades due to a number of factors including changes in the socio-economic determinants, crops grown, objectives and R&D efforts. The study revealed the growing popularity of contract farming of pineapple as intercrop in the immature phase of NR in central Kerala. The results of the analysis highlighted the growing divergence between the recommended and adopted agro-management practices in intercropping of pineapple under contract farming and the potential challenges to the agronomic sustainability of NR cultivation.

Keywords: Contract farming, Intercropping, Natural rubber, Pineapple, Socio-economic

INTRODUCTION

The evolution of farming systems from the primitive shifting cultivation to the modern high precision farming has traversed various milestones guided by a host of historical and region-specific factors. The shift to commercial agriculture contained a specified package of recommended inputs and farm management practices to maximise yield and production. Though the input intensive farming systems led to significant increase in yield, the cost of cultivation also increased with important

policy implications for both annual and perennial crops in the era of market uncertainty. Concurrently, the excessive use of fertilizer and pesticides posed many health and ecological hazards. The achievements in high productivity based on higher consumption of chemical inputs lead to environment degradation and human health effects in the long-run, as is evident in many countries, where commercial agriculture is widespread (Wilson, 2000). However, the cumulative impacts of the changes varied across regions, crops and farming systems. The steady increase in