

SEASONALITY IN RUBBER YIELD AND PRICE AND RATIONAL TAPPING DECISION

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Latex yield from Para rubber (*Hevea brasiliensis* Muell. Arg.) is highly sensitive to the prevailing ambient weather conditions and exhibits seasonal variations in the different agro-climatic regions where it is cultivated. Monthly share of latex yield of 260 clones from 24 field trials conducted by the Rubber Research Institute of India in four locations in the traditional region (Central and North Kerala, Kanyakumari district in Tamil Nadu and South West Karnataka), four in North and North East India (Assam, Meghalaya, Tripura and West Bengal) and two locations in Central India (Maharashtra and Odisha) was examined from published sources to identify the lean and high yielding months/seasons in each region. The traditional region experienced a productive period of 10 months which was reduced to eight months in Central and NE India due to varying stresses. The average yield during the three lean months from February to April in all three regions was to the tune of 15 per cent of the total annual yield. Price of rubber remained largely insensitive to monthly yield variations. The study throws light on how to regulate tapping by growers in each region by skipping of tapping in the extremely low yielding months and harvesting maximum yield in the high yielding months rather than abstaining from tapping altogether under low price situations.

Keywords: *Hevea brasiliensis*, Lean yield, Peak yield, Price, Region, Seasonality, Tapping rest

INTRODUCTION

Production of latex from *Hevea brasiliensis* in India follows a regular, predictable and repetitive seasonal pattern every year which closely tracks the intra-annual rhythms in weather, particularly temperature and rainfall (Rao *et al.*, 1998; Raj *et al.*, 2005; Raj and Dey, 2008; Satheesh and Jacob, 2011). Seasonality in rubber yield is more pronounced in regions that are away from the equator where distinct seasons exist. Regions experiencing more tropical or equatorial climate round the year will therefore see less seasonal variations in rubber yield than the subtropics or

temperate regions where climatic conditions show more marked seasonal variations.

Compared to Malaysia, Thailand or Indonesia where the rubber growing regions share a more equitable climate, seasonality in yield is very pronounced in India where rubber is cultivated in more diverse climatic regions (Vijayakumar *et al.*, 2000). Traditional rubber growing regions of India (Western Ghats states) fall in the relatively tropical climate with less pronounced seasonal variations in climate, whereas rubber growing regions of North East (NE) Indian states (Sub-Himalayan states) have a more subtropical/temperate climate with more