

## **A COMPUTER MODEL FOR ASSESSING AGRO-CLIMATIC AND EDAPHIC FEASIBILITY FOR RUBBER CULTIVATION IN THE TRADITIONAL TRACT**

T. Vilasachandran, K. Usha, V. S. Motilal and M. R. Sharma

Vilasachandran, T., Usha, K., Motilal, V. S. and Sharma, M. R. (1992). A Computer model for assessing agro-climatic and edaphic feasibility for rubber cultivation in the traditional tract. *Indian Journal of Natural Rubber Research*, 5 (1&2) : 206-216.

A computer model has been designed to assess the agro-climatic and edaphic feasibility of an area in traditional tract for commercial rubber cultivation. This model devised in Lotus 1-2-3 employing 'nested @ IF function' is useful to indicate the suitability of an area against each agro-climatic and edaphic factor based on pre-defined suitability indices and to infer the overall agro-climatic and edaphic suitability of an area for commercial rubber cultivation. The model can accommodate changes in suitability indices and is user friendly.

**Key words:** Lotus 1-2-3, Nested @ IF function, Suitability indices, *Hevea*.

T. Vilasachandran (for correspondence), K. Usha, V. S. Motilal and M. R. Sharma, National Bank for Agriculture and Rural Development, P. B. No. 6552, Dr. Annie Besant Road, Worli, Bombay - 400 018, India.

### **INTRODUCTION**

Agro-climatic factors Like latitude, altitude, temperature, relative humidity, water availability, wind and edaphic factors like slope, soil type, depth, drainage, water table and pH have to be critically assessed to ascertain the feasibility of an area for commercial rubber cultivation. The basis of such an assessment is matching these factors of an area with pre-defined feasibility indices to arrive at the feasibility decisions.

The prospects of employing computers for this purpose appears to be quite promising. Such a computer model for coconut cultivation was devised by Vilasachandran *et al.* (1991). An identical

procedure is employed here to develop a computer model for rubber.

### **EXPERIMENTAL**

The program has been devised in Lotus 1-2-3 employing 'nested @ IF function'. The @ IF function instructs 1-2-3 to display a particular result if a condition is true and a different result if the condition is false. The function makes full use of logical formulae and so is considered as a logical function. The structure of the function is :

@ IF (condition, argument 1, argument 2),

where

'condition' is the condition being tested