

THESIS TITLE : FACTORS AFFECTING THE UTILIZATION OF CHEMICAL
FERTILIZER IN PARARUBBER PLANTATION OF SMALL
FARM HOLDERS IN CHANGWAT SATUN.

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Abstract

The objectives of this study were : (1) to study general social and economic characteristics of farmers, (2) to study cultural practices in pararubber cultivation of farmers, and (3) to study the relationships between selected social, economic, physical and biological factors concerning the utilization of chemical fertilizer in pararubber plantation of farmers.

The study sample consisted of 200 small pararubber farm holders in 3 Amphur of Changwat Satun. The collection of data was carried out by face to face interview. The data were analyzed and compared by percentages, arithmetic means, Chi-square, Cramer's V and Phi through the programs of SPSS^x (Statistical Package for Social Sciences Version X).

The results showed that the majority of the small pararubber farm holders were 36-45 years old, finished primary education and had family labours of 1-2 persons. The average land area being grown pararubber was 11.30 rai and the average family income was 28,746.26 baht/year.

For agronomic practices, the results showed that most of the farmers used improved varieties of pararubber and carried

out some recommended practices. The average age of the pararubber trees was 10.7 years old with the average yield of 190.5 kg./rai/year. The farmers used chemical fertilizer with the 1-6 years old trees and then they used the lower rate of chemical fertilizer with older trees.

From the data analysis, it was found that there were 19 factors significantly related to the utilization of chemical fertilizer. They were : (1) educational level, (2) knowledge on fertilizer formula, (3) knowledge on fertilizer rate, (4) knowledge on period to apply fertilizer, (5) membership of agricultural organizations, (6) contact between farmers and agencies, (7) information sources, (8) radio listening, (9) leaflet reception, (10) size of areas to be replanted, (11) family income, (12) debt condition, (13) debt in formal system, (14) pararubber prices, (15) distances between field and home, (16) varieties used, (17) planting technique, (18) age of pararubber and (19) annual yield of pararubber.

As a result from this study, to improve the productivity of pararubber plantation, the 7 following recommendations were given : (1) providing training programs, (2) transferring knowledge by leaflet and radio, (3) establishing pararubber groups and improving of existing pararubber groups, (4) encouraging farmers to become members of agricultural organizations, (5) providing adequate amount of fertilizer through agencies, (6) encouraging the establishment of local processing factories and (7) insuring pararubber prices. Further research work should be conducted on the 4 following topics : (1) distribution techniques of chemical fertilizer required by farmers, (2) problems and needs for capital of farmers, (3) costs of pararubber production, and (4) factors affecting the achievement of pararubber groups.