

GIS Modeling for Monitoring and Attention of Rubber Plantation

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ABSTRACT

This study aimed to model GIS data for monitoring and attention in rubber plantation. The study area was Nongrawiang Center of Rajamangala University of Technology ISAN. Nongrawiang Center establishes in the northeastern of Nakhon Ratchasima province, Thailand. Herein, this study collected field data of rubber plantation based on tally sheet. The collected data in tally sheet comprised of (1) plot no., (2) plot size (sq.m), (3) data of rubber tree such as UTM coordination of rubber tree (x,y), height of rubber tree, perimeter of rubber tree, and distance between rubber tree. These field data was transferred and processed into GIS to produce the spatial layers of rubber plantation, and was used in GIS modeling. Moreover, the concerned-spatial layers for GIS modeling were soil layer, topographic layer etc. and non-spatial data were attention data of rubber plantation from Nongrawiang Center in types of documents.

As a result, the spatial layers were used for GIS modeling on monitoring and attention in rubber plantation such as layer of rubber plot, layer of rubber trees in each rubber plot including attribute data (height, perimeter, and other attention data), soil layer, topographic layer, water body, route layer, and land use of Nongrawiang Center. This GIS modeling of this study is beneficially used for representing such important-spatial factors in determining monitoring and attention of rubber plantation for official and boss through accessing of spatial level based on GIS modeling before we survey in real ground of Nongrawiang Center.

Key Words: GIS modeling, Rubber Plantation, Monitoring and Attention, Nongrawiang Center