

**A GEOGRAPHICAL ASSESSMENT ON SUSTAINABLE
FOREST MANAGEMENT OF BAGO YOMA IN
THE BAGO REGION (EAST)**

PhD DISSERTATION

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ABSTRACT

The Bago Region (East) is located between longitudes $95^{\circ}47'58.84''$ E and $97^{\circ}17'27.85''$ E and between latitudes $16^{\circ}15'9.96''$ N and $19^{\circ}27'6.53''$ N comprising the seven townships namely, Yedashe, Taungoo, Oaktwin, Pyu, Kyauktaga, Daik-Oo and Bago townships in which the forest resources of Bago Yoma are found. The Bago Yoma of Bago Region covers roughly an area of 1.5 million ha. The Bago Yoma forest consists of mixed trees of various species intermingling with vast stretches of bamboo. The population pressure and particular social and economic activities of the region cause the degradation and deforestation of forest. The main threats to forest resources in the region are: encroachment by farmers, shifting cultivation, forest fires, building of dams, urbanization and building of roads and lack of awareness of the importance of biodiversity. The research focuses not only on finding the determinant factors of forest degradation and deforestation in the study area but also on searching the appropriate ways and the best strategy for sustainable development of the forest sector in the study area. To complement this aim of the research works, modern technologies such as GIS and Remotes Sensing are used to extract the environmental and physical variables required for sophisticated spatial and temporal analysis. One of the efforts of this research is to find out the suitable area for sustainable management measures such as determination of proper areas of forest plantation and timber production. The hardwoods like a teak are highly depended on physical environments such as topography, precipitation, temperature, soils, and geologic conditions. This research points out the result for potential teak plantation sites in eastern Bago Yoma. The potential teak plantation areas are mostly found in Botaung, Khaboung reserved forest areas and some of the Idon Kun reserved forest area. Among them, Khaboung Reserved Forest Area is determined the model teak forest. Therefore, Botaung and Idon Kun reserved forest areas can provide the intensive teak plantation programs. Moreover, for variable of land cover parameter, dense low high vegetation cover determined by second prior area for teak plantation. Due to the ground survey, most of the dense low high vegetation areas are bamboo forests. The market for non-timber forest products such as bamboo products should be created for future export income while teak plantation will be implemented in those areas.

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