

**ANALYSIS OF CHANGES IN THE RURAL
ENVIRONMENT OF TAUNGOO TOWNSHIP**

PhD DISSERTATION

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ABSTRACT

The spatial and temporal changes in the rural environment were investigated in Taungoo Township, Taungoo District in Bago Region(East), the Republic of the Union of Myanmar. The relationships and interactions between natural resources and human resources are essential to fulfill the regional development planning. Thus, the main purpose of this study is to explain the changing processes of biophysical and socio-economic conditions in rural areas of Taungoo Township. To fulfill the objectives, this research starts with spatial-temporal descriptions of the study area. Illustration of alteration in the morphology of Sittaung River is provided by overlapping of topographic map (1948), area photo (1984) and satellite images (Google Earth 2010).It results in finding of reasons and impacts of river shifting within township. To assess density of forest changes, satellite images are also used in this study and 2% of forest area is different between 1990 and 2007. Human activities impact on the density of forest and hard wood price. Statistical methods are applied in this dissertation to analyze spatial distribution and temporal changes with the help of qualitative thematic maps and quantitative thematic maps. Ideal Hexagonal Lattices Method is used to propose suitable locations of social service centres. As a result, social service centres should be posed in the easternmost and westernmost of township. To explore the spatial and temporal changes of agriculture in Taungoo Township, Bhatia's location quotient method (1965) is used and this method determines the regional concentration of crops. Fluctuation of cultivated areas depends on market price and concentration of crops is determined by soil type and escaping flood. The other reason for the increase of sown acreage was the policy of government to conduct open market system and cultivate any kinds of crop what the farmers desire. As a result of rising income farmers have tried to have modern machines and changed agriculture practices. Alternations in these three environments,(physical, social and economic)result in the forming of chances and challenges within township.

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