

**SUSTAINABLE AGRICULTURE IN RURAL AREA:
A CASE STUDY OF LEWE TOWNSHIP,
MANDALAY DIVISION**

PhD DISSERTATION

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Abstract

This dissertation is intended primarily to investigate the Sustainable Agriculture in Rural Area, with emphasis on the spatial pattern of agricultural land use and local farming practices; its relationship with the environmental condition and agricultural policies in Lewe Township. Sustainable Agricultural Practices with respect to environmental deterioration and economic development were studied. Physical conditions of Lewe Township favoured both wet cultivation and dry farming. Changes in cultivated lands were studied by Remote Sensing and GIS, showing that there were changes between 1990 and 2007. The increase of cultivated land areas in Lewe Township was mainly due to the availability of water from the constructed dams and reservoirs. It is the main supporting factor on agricultural practices in Lewe Township. Paddy cultivation and farming practices are also emphasized by using questionnaire results and interview results. Ya cultivation is studied from secondary and primary data. According to these results, agricultural practices differ from village to village with socio-economic, education and cultural conditions of the farmers. Both the quantitative analysis and qualitative assessment are applied to study agricultural condition of Lewe Township. For these assessments quantitative methods such as Cluster Analysis and Factor Analysis are employed to measure agricultural development of Lewe Township. It clearly defines distinctive clusters and factors which are closely related to agriculture of Lewe Township.

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