World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:8, No:11, 2014

Historical Landscape Affects Present Tree Density in Paddy Field

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Abstract : Ongoing landscape transformation is one of the major causes behind disappearance of traditional landscapes, and lead to species and resource loss. Tree in paddy fields in the northeast of Thailand is one of those traditional landscapes. Using three different historical time layers, we acknowledged the severe deforestation and rapid urbanization happened in the region. Despite the general thinking of decline in tree density as consequences, the heterogeneous trend of changes in total tree density in three studied landscapes denied the hypothesis that number of trees in paddy field depend on the length of land use practice. On the other hand, due to selection of planting new trees on levees, existence of trees in paddy field are now rely on their values for human use. Besides, changes in land use and landscape structure had a significant impact on decision of which tree density level is considered as suitable for the landscape.

Keywords: aerial photographs, land use change, traditional landscape, tree in paddy fields

Conference Title: ICEEE 2014: International Conference on Ecological and Environmental Engineering

Conference Location: London, United Kingdom Conference Dates: November 28-29, 2014