RESEARCH CATALOGUE

ENVIRONMENTAL AND CLIMATE SCIENCE

ASSESSMENT OF VEGETATION FIRES IN MYANMAR RELATED TO TRANSBOUNDARY HAZE POLLUTION

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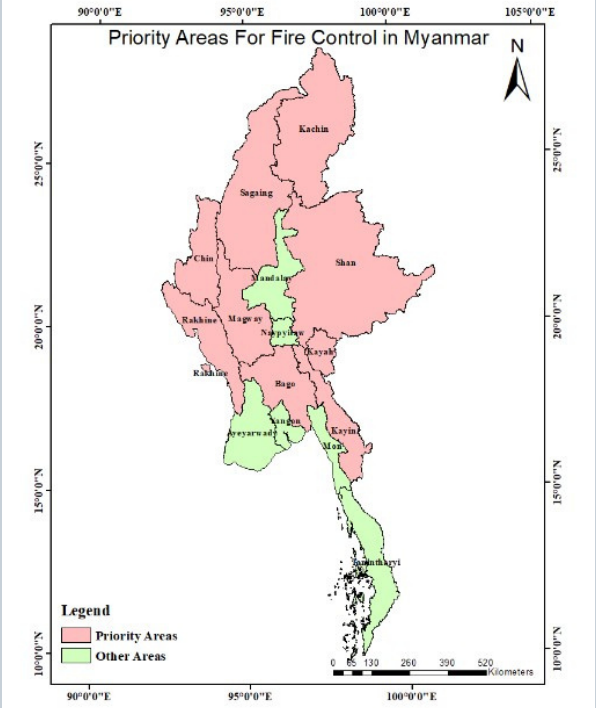
The aim of this research work was to identify the types of vegetation that are mainly exposed to fires, to develop a risk area map using annual fire hotspots density and annual overall burn area and to evaluate the causes of vegetation fires to formulate recommendations for vegetation fire control in Myanmar.

The results of this study showed that most fire hotspots occurred on forest land (46%), followed by other wooded land (37%) and crop land (16%) over the period 2006-2017 based on satellite data analysis.

Forest land **46%**

Wooded land **37%**

Crop land **16%**



From these results, 9 states and regions were identified as priority areas in the country to implement vegetation fire control measures. Vegetation fires were identified to be mostly due to anthropogenic activities. Burning for land clearance was found to be the main cause, followed by burning for collection of wood and non-wood forest products, careless and accidental fires, burning for hunting, and burning for the removal of agricultural residues. Fires from prolonged drought in Myanmar were found to be quite a rare occurrence.

The findings of this study are timely and should contribute guiding policy makers in developing plans and measures for effective control of vegetation fires in Myanmar. The results of this study were published in the Journal of Sustainable Energy and Environment and also presented at the 7th International Conference on Sustainable Energy and Environment (SEE 2018) in Bangkok, Thailand.