

APPLICATION OF REMOTE SENSING TECHNOLOGY TO QUANTIFY CHANGES IN FOREST EXTENTS IN LANGBIANG BIOSPHERE RESERVE DURING 1995- 2017

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Summary

Using remote sensing and GIS technologies in constructing the status of forest maps as well as changes in extents of forest has become commonly in Vietnam. The study has successfully constructed forest status in 1995, 1999, 2005, 2011, 2014 and 2017 using vegetation index together Unsupervised and Supervised Classification methods in the Langbiang Biosphere Reserve, Lam Dong province. Based on the extents of forest maps defined, study has quantified changes in forests during the selected periods of 1995–1999, 1999-2005, 2005- 2011, 2011- 2014 and 2014- 2017. As a result, findings show that the extents of forests have been changed during the whole period of 1995-2017. Result of constructing a key for image classification shows that images without reference data for classification have over 83% of map accuracies. Therefore, maps of forest status as well as changes in forests can be used for forest resources management activities under Langbiang Biosphere Reserve.

Keywords: *Buffer zone, changes, forest land, GIS, remote sensing, Langbiang, biosphere reserve.*