

## **Comparison of MODIS-Based Rice Extent Map and Landsat-Based Rice Classification Map in Determining Biomass Energy Potential of Rice Hull in Nueva Ecija, Philippines**

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**Abstract :** The underutilization of biomass resources in the Philippines, combined with its growing population and the rise in fossil fuel prices confirms demand for alternative energy sources. The goal of this paper is to provide a comparison of MODIS-based and Landsat-based agricultural land cover maps when used in the estimation of rice hull's available energy potential. Biomass resource assessment was done using mathematical models and remote sensing techniques employed in a GIS platform.

**Keywords :** biomass, geographic information system (GIS), remote sensing, renewable energy

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