

GIS MAPPING AND PATTERN DISTRIBUTION OF AGRICULTURAL MACHINERIES
IN THE MUNICIPALITY OF BAROTAC VIEJO, ILOILO

A THESIS

Presented to

The Faculty of the College of Agriculture, Resources and Environmental Sciences

Central Philippine University

Iloilo City

In Partial Fulfillment

of the Requirements for the Degree

BACHELOR OF SCIENCE IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING



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May 2024

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ABSTRACT

The purpose of this study was to locate and analyze the pattern distribution of the different agricultural machineries used in land preparation, crop establishment, and harvesting operation like four-wheel tractor, rice transplanter, and rice combine harvester using the geographic information system in the Municipality of Barotac Viejo, Iloilo. The researcher conducted site visits to the engaged owners to assess the status of agricultural machineries using prepared data sheets in order to verify the collected information. Global positioning system was used to obtain the latitude and the longitude data of certain locations of Agricultural machineries. ESRI ArcGIS software was used for the location tagging and map representation of agricultural machineries. A thematic layer maps was created from the data analysis: location, number of units, and average horsepower of agricultural machineries used in land preparation. The result shows that there are only 14 out of 26 barangays that have agricultural machineries in which four barangays have all 3 agricultural machine available nine barangays have a four-wheel tractor and rice combine harvester available, two only has tractors available and the remaining 12 barangay has no recorded agricultural machineries used for land preparation. The result of pattern distribution considered rice combine harvester as dispersed, four wheeled tractor considered as random and rice transplanter considered as dispersed. The generated map of the agricultural machineries from this study would be beneficial to the LGU, farmers, and stakeholders to locate and boost the utilization of agricultural machinery in the municipality.

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