

**ASSESSMENT ON WOOD CONVERSION AND RESIDUE MANAGEMENT IN
SELECTED SAWMILLS IN ABEOKUTA METROPOLIS**

BY

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ABSTRACT

The study examined wood conversion and residue management in selected sawmills in Abeokuta metropolis. Three major locations were selected in the metropolis; they are Abeokuta North, Abeokuta South, and Odeda local government. Twenty-nine sawmills were recorded in the metropolis during a reconnaissance survey with the following distribution; fifteen (15) sawmills in Abeokuta North, three (3) sawmills in Abeokuta South, eleven (11) sawmill in Odeda local government.

A total of twelve (12) sawmills were selected at random using simple random sampling technique. At each sawmills three (3) logs were selected for sawing. Logs selection was done in such a way that both fairly straight and crooked logs as well as large and small logs were included. A total of 36 logs were studied. Questionnaire were also administered to the selected sawmills.

The volume of all the round logs for conversion were initially determined using Newton's formula. After conversion, the volumes of lumbers were re-determined. However the difference between the initially determined volume and the re-determined volume represents the total waste produced. This study revealed that the total lumber recovery by the twelve (12) sawmills was 4.389m³, and the total volume of wood waste generated by the twelve (12) sawmills was 1.938m³.

Consequently Olorunwa sawmill with 0.348m³ lumber recovery had the highest Percentage lumber recovery of 78.73%, while Ayodeji sawmill with 0.468m³ lumber recovery had the least percentage lumber recovery of 63.93%. From the study it can be deduced that Olorunwa sawmill with 0.166m³ total volume of waste had the highest percentage volume of waste, while Fajimi sawmill with 0.142m³ total volume of waste had the least percentage volume of waste.