## ALTERNATIVE COOKING FUELS FROM SAWMILL WASTES

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## **ABSTRACT**

In a conversion efficiency study, 10 sawmills were selected out of the existing 44 in Abeokuta metropolis. For 5 days per week in each of the 10 sampled sawmills, the volumes of all the round logs to be converted each day were determined using Newton's formula. At the end of the day's work, the volumes of all lumbers converted were determined and were subtracted from those obtained in the morning, whatever is obtained was the volumes of wood wastes generated in each of the sampled sawmills. This study revealed that the mean conversion efficiency of the 10 elected mills was 56.05%. As a result, the total volume of wood waste generated per day by the 10 mills was approximately 52.00m3. In the entire Abeokuta metropolis 2288m3 of wood wastes will be generated per day. When carbonized. 381 tonnes of charcoal will be produced. In conclusion, it is suggested that enormous volume of wood waste generated in virtually all the sawmills in Abeokuta and indeed Nigeria are collected together and be used in the carbonization of charcoal as substitute for kerosene.

**Keywords:** Charcoal, conversion, lumbers.