

The need to develop instruments to capture the realistic stumpage volume and influence loggers to improve on their logging been a topic of interest in recent times. This study assessed the logging efficiency in Ghana and developed allometric stumpage volume. A total of 135 trees from nine timber species were sampled from three logging sites during commercial logging. The average logging recovery for all sampled trees was about 75 %. The small-end diameter of the merchantable residues 31 cm and 60 cm while their length values varied from 3.0 m to 8.5 m. In general, species-specific models exhibited better predictive than mixed-species models. Models that predicted total merchantable volume from the volume of the extracted logs had the Furnival index values ranging from 0.590 to 1.727. Results of the models' validation indicated that mixed species models merchantable volume better for relatively small trees than for big trees with merchantable