

# **COMPARATIVE STUDY OF EFFECT OF DIFFERENT PARAMETERS ON PERFORMANCE AND EMISSION OF BIOMASS COOK STOVES**

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## **ABSTRACT**

The effect of different parameters on performance and emission of four biomass fired cook stoves have been investigated. The parameters considered were moisture content of fuels, size of fuel, method of ignition and design, while the selected cook stoves were an traditional cook stoves, improved cook stoves developed by MNES National Programme on Improved Cook stoves(NPIC), improved cook stove developed by Thai and improved stove developed by Fiji. It was found that increase in fuel moisture content resulted in decrease in stove efficiency. The fuel size did not show any significant influence on the efficiency of the stove. The method of ignition did not affect the efficiency of the stove and it showed significant influence on design of cook stove. In this paper an attempt has been made to compare the performance and emission factors of most commonly used stove categories are presented. In this paper an attempt has been made to review energy efficiency measures of cooking stoves.

**KEYWORDS:** Traditional Cooking Stoves, Stove Efficiency, Moisture Content, Fuel Size, Improved Cooking Stoves