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The Effect of Different Insulation Layer Materials on Cookstove Efficiency

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Abstract

Cooking is a fundamental aspect of daily life, and in many parts of the world, traditional cookstoves remain the primary means of food preparation. However, the inefficiency of these cookstoves can lead to a range of environmental and health issues. In an era where sustainability and energy efficiency are paramount, improving the performance of cookstoves is not only a matter of convenience but also a crucial step towards reducing energy consumption and mitigating indoor air pollution. This research paper delves into the fascinating realm of cookstove efficiency by exploring the impact of different insulation layer materials. Insulation is a pivotal component in cookstove design, as it plays a vital role in retaining heat and ensuring that energy is utilized efficiently during the cooking process. By investigating various insulation materials and their effects on cookstove performance, this study aims to contribute to the ongoing efforts to develop more sustainable and efficient cooking solutions. In doing so, it aspires to offer insights

that can enhance the livelihoods of millions while addressing the global challenges of energy conservation and indoor air quality.

Keywords: cookstoves, traditional cookstoves, inefficiency, sustainability, energy efficiency, performance