

Additional information to the proposed JCM methodology

“Energy Saving by Introduction of High Efficiency Firewood Cookstove to Replace Traditional Cookstove” on setting default value for reference emissions

1. Overview of the methodology applied

The methodology proposed for the replacement of traditional cookstove with high-efficiency stoves in Cambodia is grounded in addressing key socio-environmental challenges while ensuring compliance with JCM principles.

2. Common cooking method in Cambodia

The population of Cambodia is 17,423,880 based on projections of World Bank data in 2023¹. Only 20% of the people in Cambodia live in urban areas, and there aren't many large cities and 80% of the population residing in rural area has to depend heavily on forests for their basic need². Based on a document of World Bank, over 90 percent of energy used for cooking comes from wood, contributing to increased deforestation³.

3. Traditional cookstove in Cambodia

Based on study, 28.6% households, most of them in rural areas in Cambodia use a traditional stove for cooking meal⁴. Two types of stoves that use wood fuel are identified as traditional: Mong/siam, three-stone.

Type of traditional stove	Image	Efficiency
Three-stone stove		10%

¹ <https://data.worldbank.org/indicator/SP.POP.TOTL>

² <https://worldpopulationreview.com/countries/cambodia-population>

³

<https://documents1.worldbank.org/curated/en/570931468036882999/pdf/696390ESW0P1010ECHOLOGIES0Cambodia.pdf>

⁴ <https://documents1.worldbank.org/curated/es/141011521693254478/text/Cambodia-Beyond-connections-energy-access-diagnostic-report-based-on-the-multi-tier-framework.txt>

Mong/Siam stove		15%
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Source: Study of World bank

4. Reference cookstove in Cambodia

Based on study of the proposed methodology, New Lao stove (NLS) is one type of cookstove that use wood fuel and is identified as improved cookstove. This stove is widely available in Cambodia and serves as an appropriate baseline for comparison. The efficiency of NLS is 26% based on the study of World Bank. See the NLS in photo below:



The methodology proponent aims to replace traditional cookstove with efficiency of 10-15%, however, the methodology proponent chooses the NLS stove with an efficiency of 26% as the reference cookstove. This ensures the methodology adheres to conservativeness principles, avoiding overstatement of emission reductions.