

# **Household Appliance Distribution in Lao PDR**

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Based on the 2015 Housing and Population Census, approximately 77% of the rural population with road access and 88% of the rural population without road access in the Lao PDR use wood as their primary cooking fuel. The majority of these households cook on open fires using iron tripod pot supports and other forms of traditional cooking devices. Cooking with solid fuels such as firewood with open fires or traditional stoves have negative effects on health as the smoke from cooking contributes to high levels of household air pollution, which can lead to a number of deadly diseases. It also puts pressure on local natural resources such as forests and wooded lands which supply the firewood.

The main objective of the project is to reduce non-renewable biomass consumption for cooking and water boiling, therefore reducing greenhouse gas emissions, by introducing a more energy efficient and highly durable cookstove model in firewood using households in Lao PDR.

The general benefits of the project include reduction of deforestation, impacts of climate change (particularly, mitigate GHG emission. The benefits for the target households include: access to different cookstove technologies, improve living standard such as saving labor and time for collecting fuelwood; less smoke in the kitchen which reduces respiratory disease, particularly among women and children; and reduced risk of young children falling into open-fire.

The final results of the project can save the household around 50% fuel consumption and generates 2-3 tonnes of CO<sub>2</sub> emission reductions per year as compared to cooking with three-stone fires and iron tri-pods.