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Title: Jointly Modeling the Adoption, Consumption, and Exclusive Use of Clean Cooking Fuels in Rural India

Abstract: Solid fuel combustion is a major cause of dangerous household air pollution. In India, over 750 million people continue to rely on firewood and other solid fuels for their daily cooking. While access to clean cooking fuels has improved over time, most households engage in fuel stacking -jointly using both clean and solid fuels- and fail to reap the full benefits of clean cooking. Here we explore the drivers of adoption, consumption, and exclusive use of liquefied petroleum gas (LPG), India's dominant clean cooking fuel. Using ACCESS, a panel dataset of over 8,500 households from six Indian states, we demonstrate that the drivers of LPG adoption also apply to consumption and exclusive use. While fuel stacking is a challenge, improved rural incomes and education result in the exclusive use of clean cooking fuels.

Key words: clean cooking; energy access; survey research; India