







WOMEN AND UNPAID WORK

Nudging Households to Increase the Usage of Clean Fuel

Background

- The Pradhan Mantri Ujjwala Yojana (PMUY) was launched in April 2016 with the aim of providing 50 million subsidised Liquefied Petroleum Gas (LPG) connections to women in the poorest families, by March 2019.
- Over 71.9 million connections have been released under PMUY, but many of the beneficiaries have never purchased a refill.
- Women have greater exposure to solid fuels and are therefore more affected by the longterm adverse health effects. Moreover, the gender gap in time use related to cooking and fuel collection constrains women's participation in remunerative activities.

This factsheet is drawn from an ongoing Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) and Indian Statistical Institute (ISI) study that aims to study the barriers faced by rural households in switching from traditional cooking fuels to LPG; inform them of adverse health effects of solid fuel usage and the financial incentive under PMUY; assess the impact of this information campaign on LPG use; and examine the impact of the switch on health and time use of women. The study is being conducted in Indore region of Madhya Pradesh. The findings are expected to feed into information campaign of the Ministry of Petroleum and Natural Gas. The methodology involves assessing the causal effect of switching to LPG on women's outcomes by construction of a comparison group of households that are not eligible for or did not participate in PMUY. The study uses self-reported health status, and a time-use survey of women to measure the effect of LPG usage on time released for other activities. The results from this exercise would be used to design an experiment wherein information on long-term health benefits of LPG usage and the financial incentive under PMUY would be disseminated in randomly selected villages. This would be conducted by Accredited Social Health Activist (ASHA) workers by visiting randomly sampled households in 'treatment' villages on a monthly basis, and responses of women in targeted villages would be compared with those of other women at the end of a year.

Preliminary Findings

- While a large number of LPG connections have been released under PMUY, refill purchases by households are limited indicating low usage of LPG for cooking. On average, PMUY customers in Indore buy around four refills in a year while non-PMUY customers buy around seven. This suggests that PMUY customers are not switching to LPG. The government information campaign is mainly focused on safe usage of LPG cylinders and on the subsidy, and is insufficient for increasing uptake of LPG.
- There is lack of awareness regarding long-term adverse health effects of using solid fuels. Most households are not aware that solid fuel usage causes not only short-term discomfort, but also serious long-term health effects. The lack of awareness is part of the reason why households do not switch to LPG for cooking.
- There is lack of awareness among beneficiaries regarding financial incentive under PMUY. PMUY customers without registered mobile numbers may be unaware of the financial benefits that they receive. Others may be unable to read the SMSs which are in English. Most beneficiaries are also not aware that the subsidy amount increases with the fuel price, such that their out-ofpocket expenditure on fuel remains the same.
- Even if beneficiaries are aware of the financial incentive under PMUY, they may face a liquidity constraint in buying refills.
 - Cash-constrained PMUY beneficiaries may be unable to purchase refills as upfront payments are required. This could be resolved by ensuring that the subsidy for the rich does not increase with the price of fuel, and using some of the saving to increase financial support for Below the Poverty Line (BPL) households. This indicates that subsidies need to be control/targeted.
- Multiple fuels may be used by a household and there is seasonality in fuel choice. Households may use wood when it is cheap and switch to LPG during the monsoons, and may even use different fuels for cooking different items on the same day. Efforts need to be made to completely eliminate the use of solid fuels due to their adverse health effects.

Policy Implications

PMUY could be more effective by:

- Using well-designed information campaigns on the long-term health benefits of using cleaner fuels and on the financial incentive for BPL households.
- Understanding the barriers that households face in switching from solid fuels to LPG, and using the insights to inform various aspects of the design and implementation of the programme.

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For further information, please write to info@iwwage.org.

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