



Gender Impacts and Opportunities from Targeted LPG Cooking Subsidies in India



Overview

Country Context: LPG Cooking Subsidies in India

Benefits: How LPG Subsidy Reforms of 2016 Benefit Poor Women?

Limitations: Identifying Subsidy Design and its Impact on Poor Women

Recommendations

Findings are based on a combination of **primary and secondary data**.

- Primary data – based on a survey of 810 rural and urban households from Ranchi and Raipur conducted in 2017
- Secondary data – a mix of major national statistical databases that contain information on energy use and gender and studies
- Funding obtained from DfID and ENERGIA

Country Context



Country Context



About LPG Cooking Subsidies in India

- Most of India still cooks on biomass - 780 million in 2015 (IEA)
- LPG subsidies are India's biggest policy for addressing clean cooking
- India's LPG subsidies are the single largest petroleum subsidy
- Currently, subsidies support both LPG take-up (connection subsidies) and consumption



LPG Subsidy	FY14	FY15	FY16	FY17	FY 18
INR million	576,191	467,674	336,215	217,482	373,659
USD million	9,524	7,648	5,136	3,242	5,798



- Subsidised LPG is sold in the form of 14.2 kg cylinder*
- The cylinders are retailed through a national network of distributors of 3 oil marketing companies (OMCs)



Steps to accessing subsidized LPG:

- Households must obtain an LPG “connection”—that is, enroll themselves with any one OMC’s registry of beneficiaries
- Obtain the necessary equipment (a stove, cylinder, regulator and hose) from the OMC’s distributor
- Households can apply for a connection for a single cylinder (14.2 kg) or a double cylinder
- Connection comes at a significant cost, including charges for a security deposit and the cost of equipment

How is Subsidised LPG Supplied? – an “LPG Connection”



IndianOil
Oil Company
supplies
cylinders to
Distributor



LPG Distributor



LPG Distributor's
Delivery man

Customer submits application to
local LPG Distributor

Customer
receives LPG
Cylinder at home





Country Context

Understanding the Various LPG Subsidies: PMUY v/s PAHAL

	PAHAL (2014)	PMUY (2016)
Subsidy for	Consumption	Connection
Eligibility	Universal	Women from Poor Households
Subsidy Amount	Net reduction of LPG cylinder price as subsidy transferred to bank account. Subsidy amount fluctuates with price of LPG	INR 1,600 covers the cost of security deposit, hose pipe, installation and administrative charges
Subsidy Objective	Reduce illegal connections and diversion, and it succeeded in significantly reducing the number of registered beneficiaries	Targeted at “the health of women and children”; improve access for the poor

Gendered Benefits from LPG Subsidies






Benefits from LPG Subsidies

Women from households using LPG experience time saving, reduced drudgery and health benefits

LPG usage saves women, on average, an hour per day due to reduced cooking and cleaning time

FUEL USED	MORNING		EVENING	
	COOK (minutes)	CLEAN (minutes)	COOK (minutes)	CLEAN (minutes)
Biomass	77	30	73	28
LPG	49	22	47	23



LPG usage in combination with other fuels also reduces the drudgery of collecting and preparing biomass, *typically* undertaken by women and young girls

Compared to biomass, LPG's 'smokeless' cooking did not create eye and lung diseases



Benefits from LPG Subsidies

Women from households using LPG experience time saving benefits

LPG usage correlates with women spending more time on other activities

	Leisure	Reading newspaper/ magazine	Watching television	Time spent with children	Community participation
No LPG (biomass households)	79	20	74	118	35
LPG households	98	24	79	134	38



LPG usage also empowered men to cook – Survey found males seem more likely to cook if LPG is available



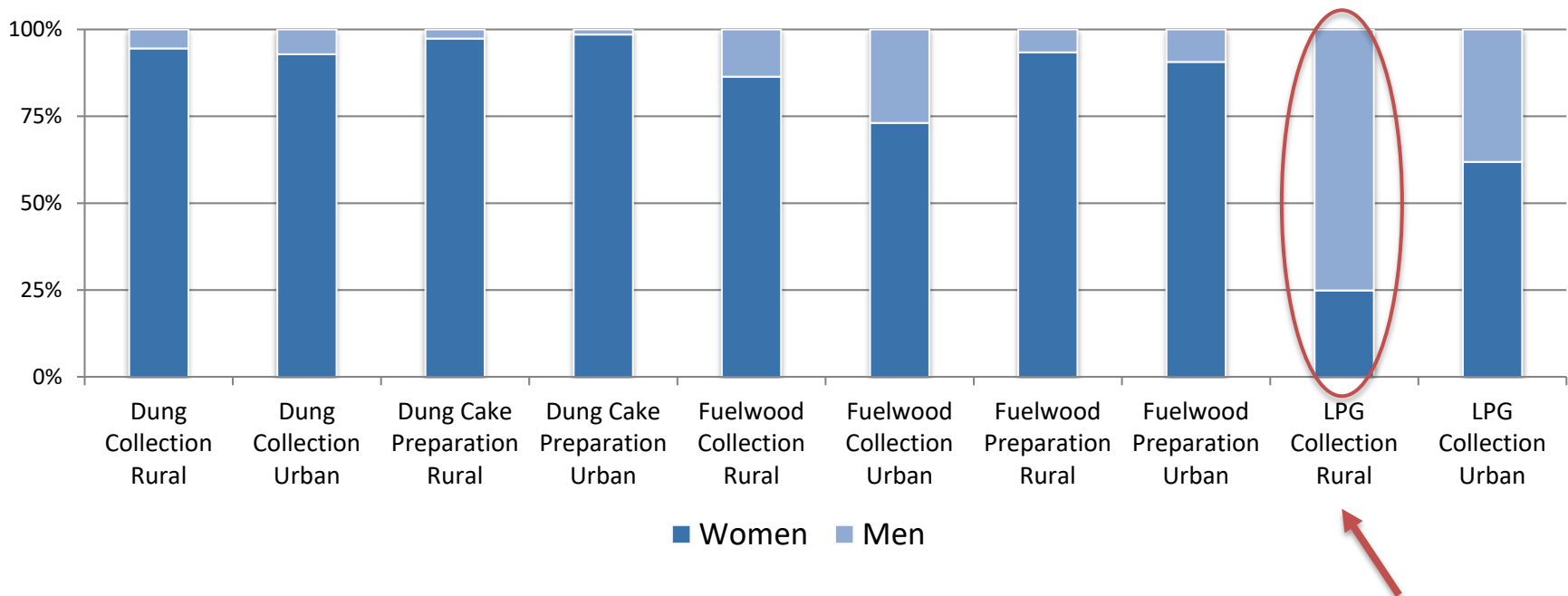
Benefits from LPG Subsidies

Fuel management responsibility *transitions* from women to men with LPG adoption

Dung cake and fuel wood: Women are responsible for collection and preparation

LPG: Women are still predominantly responsible but a larger share of men are involved

Exception - in rural areas LPG collection was predominantly the responsibility of men





Benefits from LPG Subsidies

Targeting Women *may* deliver spillover benefits

A need for documentation for registration *may* drive women's access to financial services and mobile phones

- women may be less likely to possess the documentation required for registration so can be cut off from accessing PMUY
- this requirement may help drive women's access to financial services and mobile phones

Limitations of LPG Subsidies



Limitations of LPG Subsidies



LPG subsidies only work for poor women who can access them

Benefits from LPG usage - health, time savings and reduced drudgery – are for poor women who can access LPG subsidies

Many women still cannot access the subsidy – 50 per cent of the households from our sample did not use LPG in their energy mix

Targeting issues: A large share of high-income households who continue to benefit:

- Survey found among PAHAL recipients 48 per cent did not have BPL cards
- Among PMUY households, only half (approx.) are from the poorest 40% households

INCOME GROUPS	COUNT OF HOUSEHOLDS	TOTAL %
Group 1 (poorest)	30	24%
Group 2	30	24%
Group 3	20	16%
Group 4	29	23%
Group 5 (richest)	17	13%
Total PMUY Households in Sample	126	100%

Limitations of LPG Subsidies

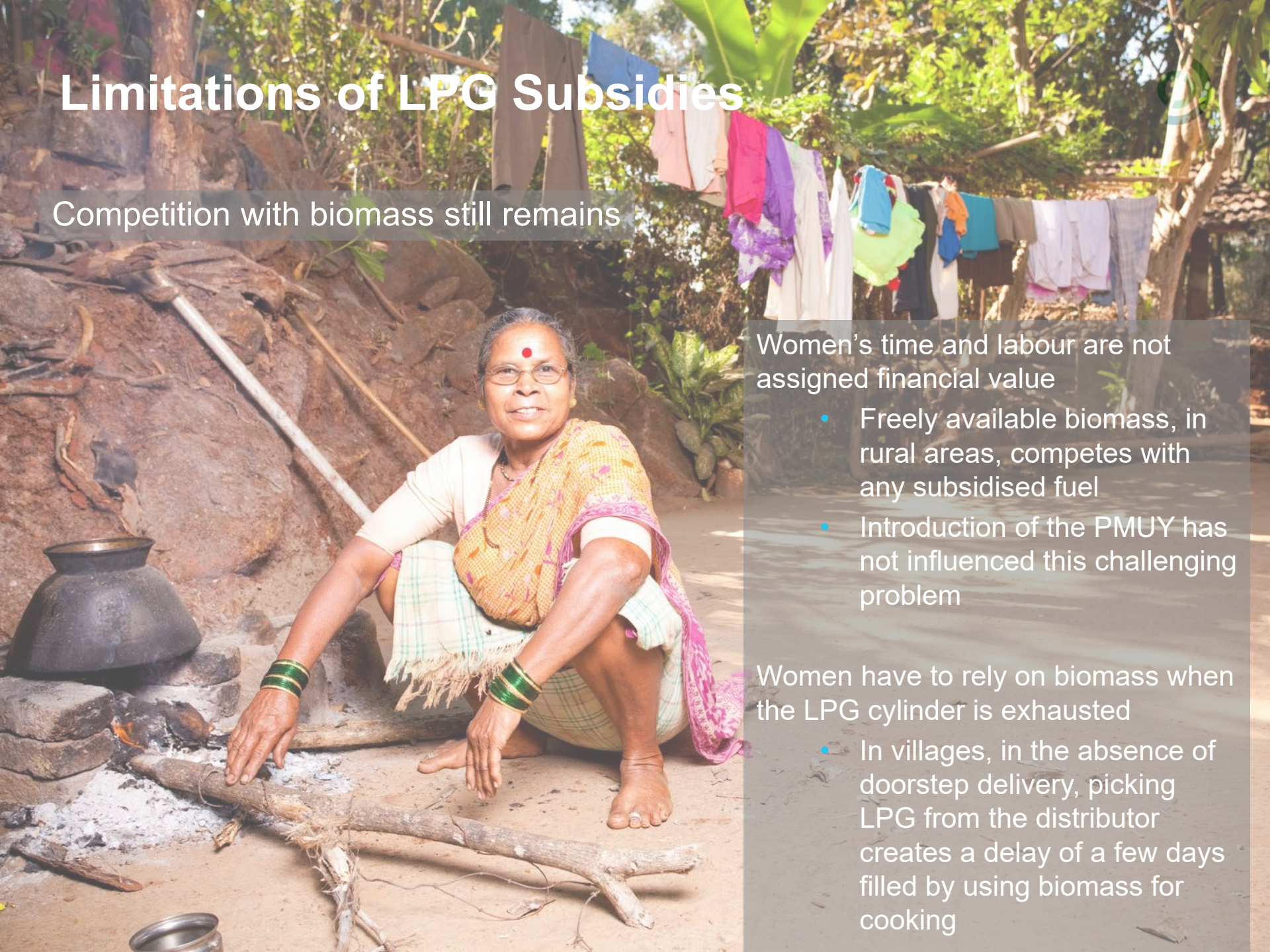
Competition with biomass still remains

Women's time and labour are not assigned financial value

- Freely available biomass, in rural areas, competes with any subsidised fuel
- Introduction of the PMUY has not influenced this challenging problem

Women have to rely on biomass when the LPG cylinder is exhausted

- In villages, in the absence of doorstep delivery, picking LPG from the distributor creates a delay of a few days filled by using biomass for cooking



Recommendations





Recommendations

Reviewing subsidy design and alternatives to subsidy

Better Targeting of LPG subsidies is needed - Among surveyed households, only 48 per cent of PMUY beneficiaries were among the poorest 40 per cent of households

Review subsidies to ensure the poorest can afford a new connection - the design of the current PMUY loan scheme effectively increases refill prices during the loan payback period

Improve education and alternative clean cooking options – the size of LPG subsidies and commitment to promote LPG competes with electric cookstoves, biogas, solar and cleaner cook stoves

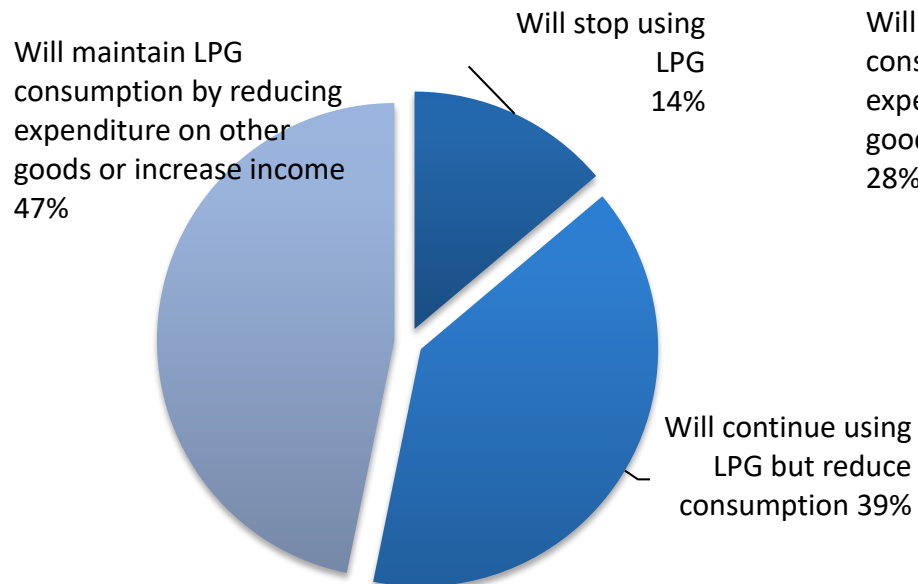


Recommendations

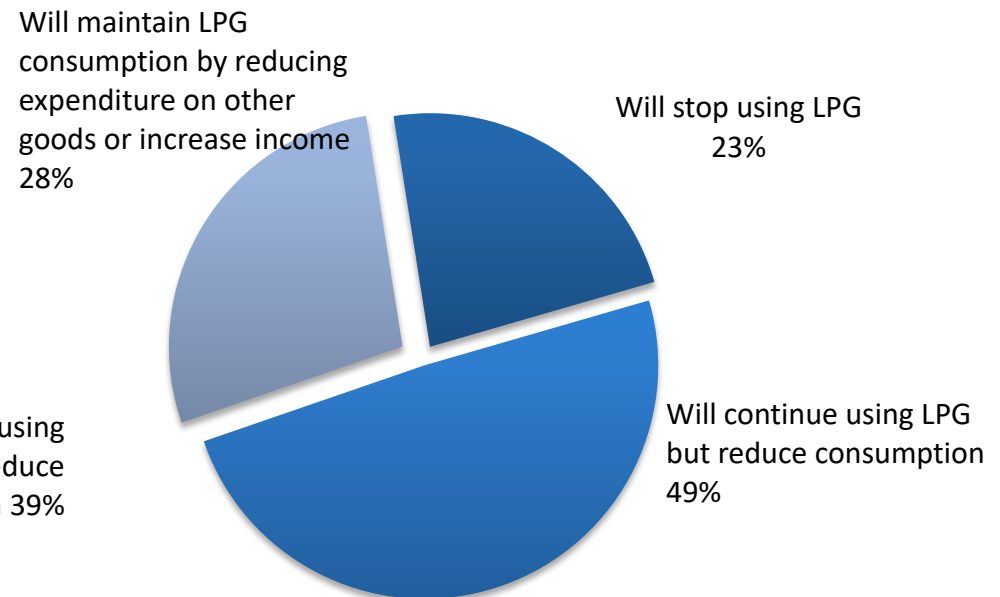
Reviewing Subsidy Reform

Subsidy reform needs to be undertaken with care to avoid negative energy access impacts

Coping Mechanism of LPG Households



126 PMUY HHs - Coping Mechanism



Thank You

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