GENDER AND ENERGY ACCESS
Part One – Impacts

People-Centered Accelerator Webinar Series
3 October 2019

Presenters
Magi Matinga, Dunamai Energy
Govind Kelkar, M.S. Swaminathan Research Foundation
Shruti Sharma & Laura Merrill, GSI - IISD

Moderated by: **Caroline McGregor,** Lead Gender and Energy Specialist – SEforALL
Introduction by: **Annemarije Kooijman,** research programme coordinator, ENERGIA

Webinar series Gender and Energy Access

Part One - Impacts

Time**:** Today (3 October 2019)

Part Two - Productive uses

Time: Thursday, 17 October 2019, 9am ET / 3pm CEST

Part Three - Economic empowerment

Time: Thursday, 31 October 2019, 9am ET / 3pm CEST

ENERGIA
INTERNATIONAL NETWORK ON
GENDER & SUSTAINABLE ENERGY

Gender and Energy Research Programme

- 5-year research project (2014-2019) funded by DFID

  Aim: Provide robust evidence on the interactions between gender, energy and poverty, to inform policy and practice

- 9 teams, 12 countries, 29 partners

  Topics: impacts of energy access, political economy, subsidies, productive uses, gender approaches, women in supply, trends

Presenters of today's webinar

RA1
Magi Matinga
Dunamai Energy

RA4
Shruti Sharma
GSI - IISD

RA3
Govind Kelkar
MSSRF

RA4
Laura Merrill
GSI - IISD

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Insights on the impact and benefits of electricity access on empowerment and overall development

Magi Matinga

RA1 EFEWEE Consortium
University of Oslo - Norway
TERI - India
Seacreaster – Kenya
Dunamai Energy – Malawi

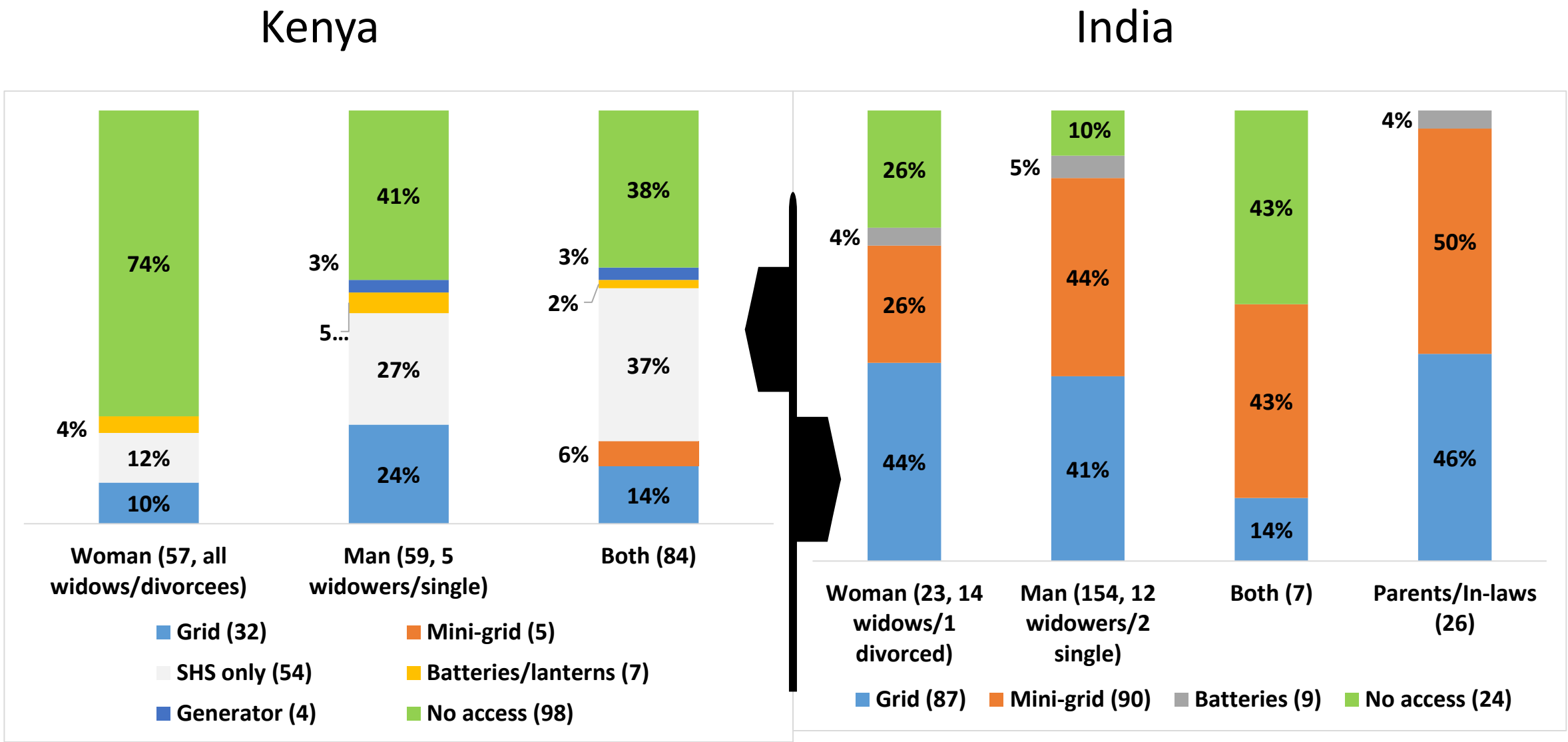
Methodology

- **Research Question:** What are the factors that enhance or restrict women's opportunities and empowerment through electrification, as users or supply actors?

- **Methodology**
  - In-depth interviews and focus group discussions: **273**
  - Survey : **642 households**

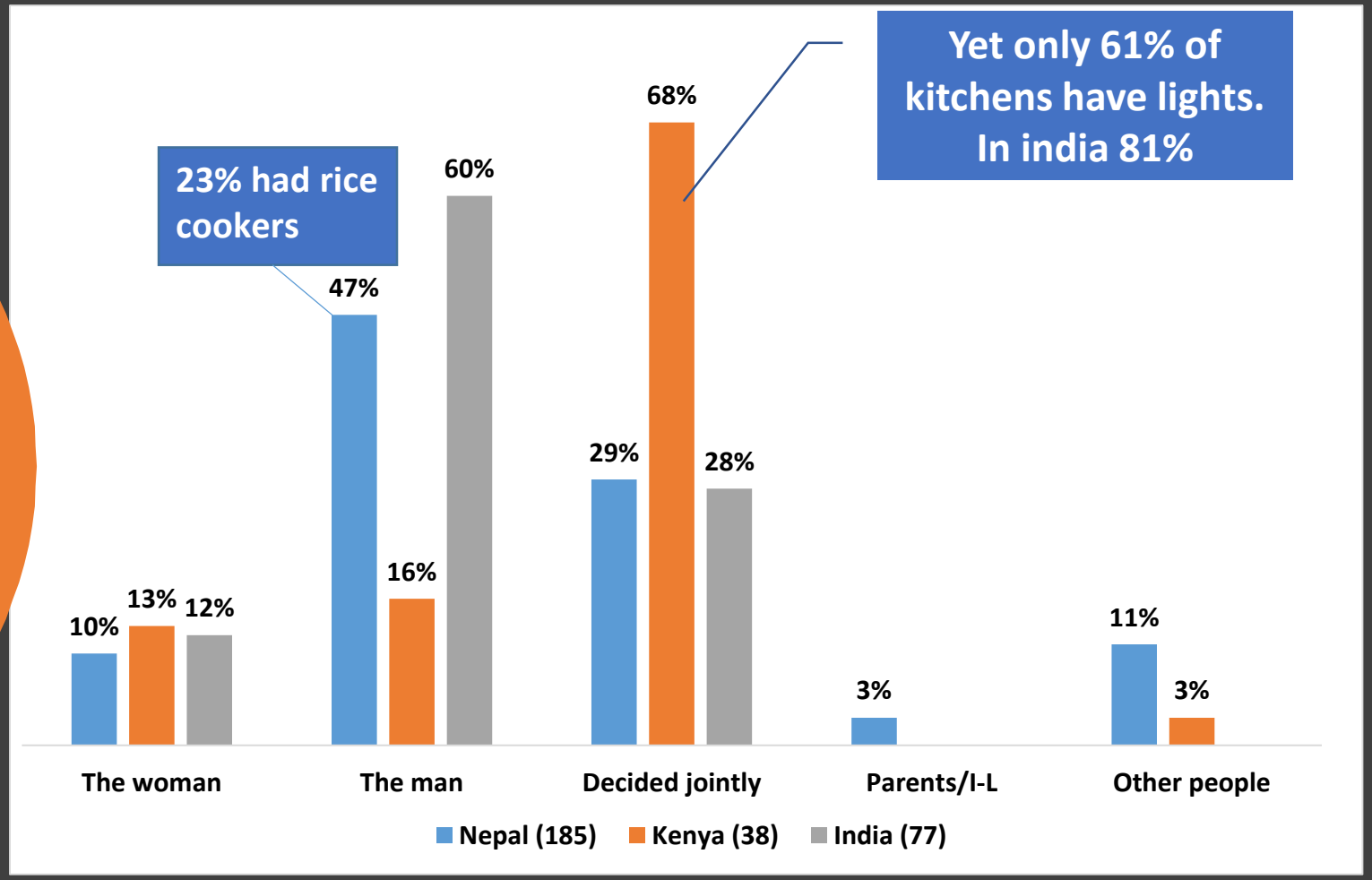
- **Countries**
  - Kenya
  - India
  - Nepal

Approaches and their impacts: Who has access?



Who decides on access points? Whose needs are serviced?

Although joint decision and women deciding are higher in Kenya, it doesn't necessarily support women's needs



Impacts on women due to involvement in electricity supply

- Social empowerment – after one woman's involvement in Ikisaya, more applied in the second round
- Change in men's perception of women's capabilities
- Perceived increase in women contributing their views during development meetings after Solar Mama project

Impacts due to use of electricity

- More information and requests regarding family planning, discreet contact
- New ideas and narratives of what women/daughters can be (careers) due to TV
- Increased choice in marriage partners (social media, TV)
- Productive uses where markets and risk reduction is available
- Decreases in time spend collecting firewood, food prep and cooking due to use of rice cookers, mills, blenders

What can be done to ensure more equitable access to electricity

Gender-specific support for marginalised groups incl. women.

Gender consciousness among users, communities, and responsiveness for installers/utilities

Ecosystem approach and working with men and women to increase women's power :

technology, finance (capital and access/consumption), capacity, institutional and policy frameworks, viability, cooperation and competition (suppliers, distributors, customers etc)

Pragmatic selection, medium to long term support for inclusion in supply chains, possibly for productive uses too

Intersectional approach in gender research

Asante

Dhanyabad

Dhanyavaad

Webinar Gender and Energy Access

Govind Kelkar

RA3 political economy

MSSRF - India

CRT- Nepal

Research Question and Sites

- **Research Question:** Does a gender responsive approach provide a greater empowerment to women and girls than traditional approaches (based on the household) in the energy sector?
- **Countries of Research**: India and Nepal, 10 rural sites
- **Methods**: Feminist political economy analysis of data collected through quantitative and qualitative methods at micro, meso and macro levels.
- **Partners:** M.S. Swaminathan Research Foundation & CRT Nepal

Drivers having most effect on gender and energy policies

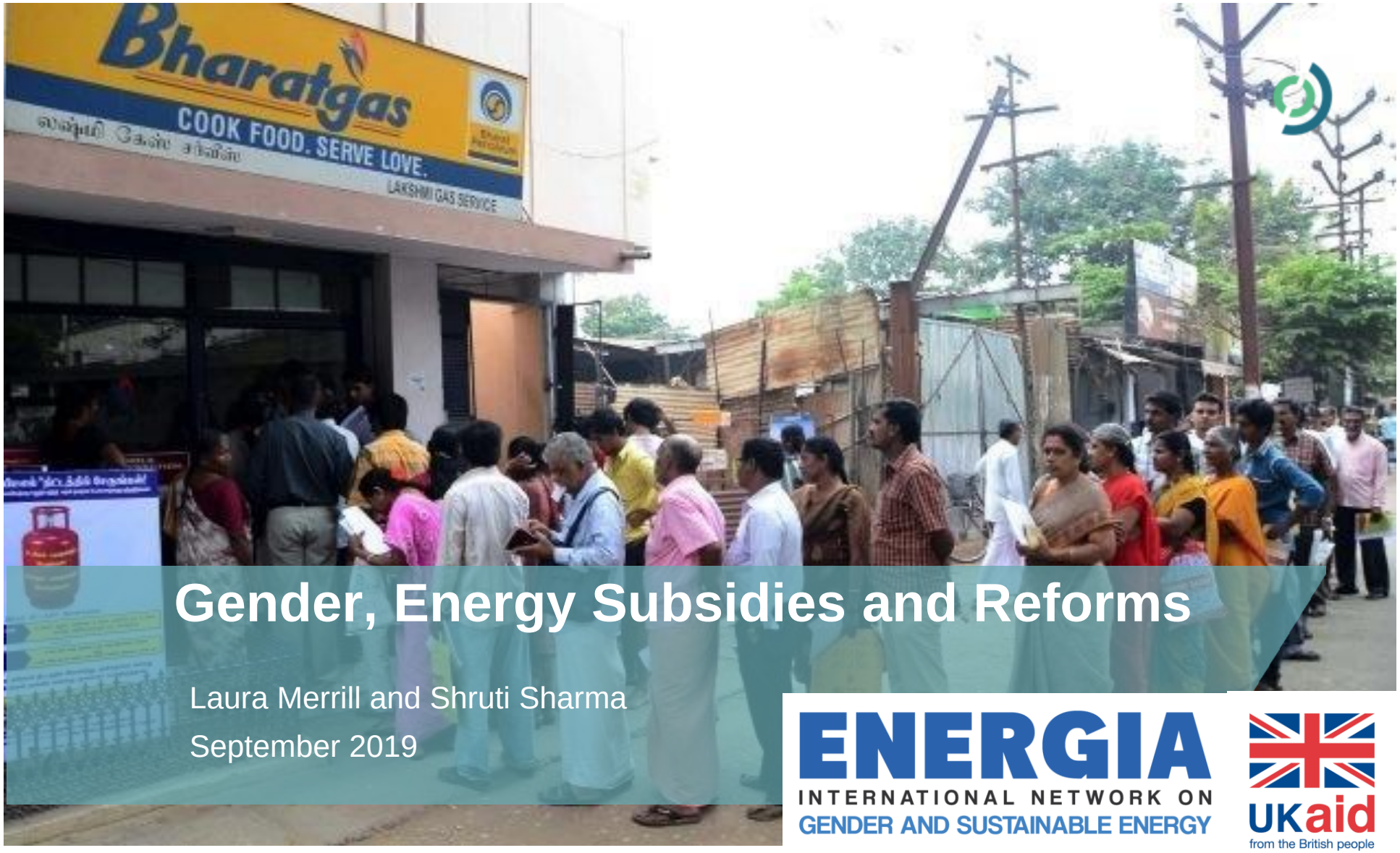
- **The state speaks to simultaneously to two groups** : the elites with male forms of power having access to governance, and the political constituency of organized groups of (rural) women and men who will influence through their voting rights
- **Enabling environment**: Institutional structures to support an enabling environment that recognizes the need to address gender specific barriers and tries to address gendered social norms, with policies and effective implementation
- **Women as economic agents**: as producers, income earners, and bread winners, not dependent on the heads of the household or subsumed in the household.
- **Women as bread winners**: 57% of women who were the breadwinners of the home, used LPG as their primary cooking fuel, compared to 29% of women who did not earn an income.

Institutional Structures for Enabling Environment through Knowledge and Skills

- At the meso and micro levels, gendered social norms are being challenged.
- When women become independent income earners, rather than unpaid family workers, social norms change in favour of women
- When women are owners of agricultural land, and thus recognised as farmers, their asset ownership increases
- Social norms also change when women are organised/self–organised in groups such as self-help groups & other collectives where many women come together to challenge social norms, they seem to be stronger and more likely to succeed.
- Two-way relationship between energy and agency:
  - What the study demonstrates is that the linkage between energy and agency is two-way. “If women’s agency enables them to turn access to clean energy into use, their use of modern energy in production, in turn, also increases women’s agency or empowers them.”

Building an Enabling Environment: Key Messages

- While Policy for energy access may include gender considerations at macro level, the outcomes at micro level are often diminished socio-economic gendered norms. Hence bringing gender-responsive change is needed through:
  - Unmediated (not through marriage relationship) asset ownership (land, house, energy & new technology)
  - Delinking land ownership with the status of farmer so that women have access to government schemes meant for farmers
  - Training and capacity development in new knowledge and financial skills as well as technology use and operations.
  - Evidence shows that valuation of women's work is needed for subsidized LPG programs to result in fuel switching to clean energy
  - Attention to women's collectives: In both India and Nepal, rural women's organisations are active agents in promoting women's greater use of clean cooking energy and agricultural appliances based on modern energy services. " We will never go back to cooking with wood"



Gender, Energy Subsidies and Reforms

Laura Merrill and Shruti Sharma

September 2019

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INTERNATIONAL NETWORK ON GENDER AND SUSTAINABLE ENERGY

UKaid
from the British people

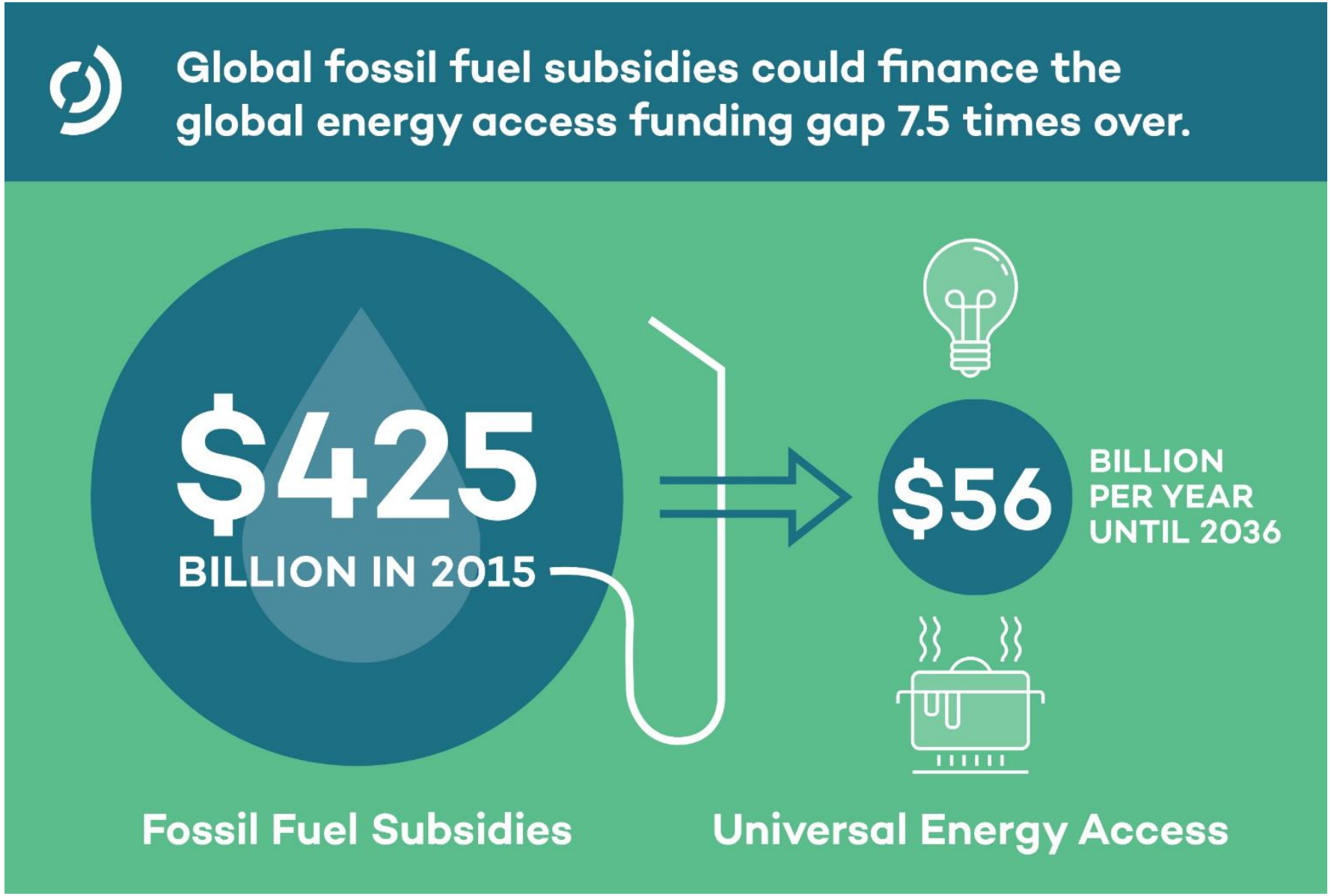
IISD
International Institute for Sustainable Development

BIDS

IRADe Integrated Research and Action for Development

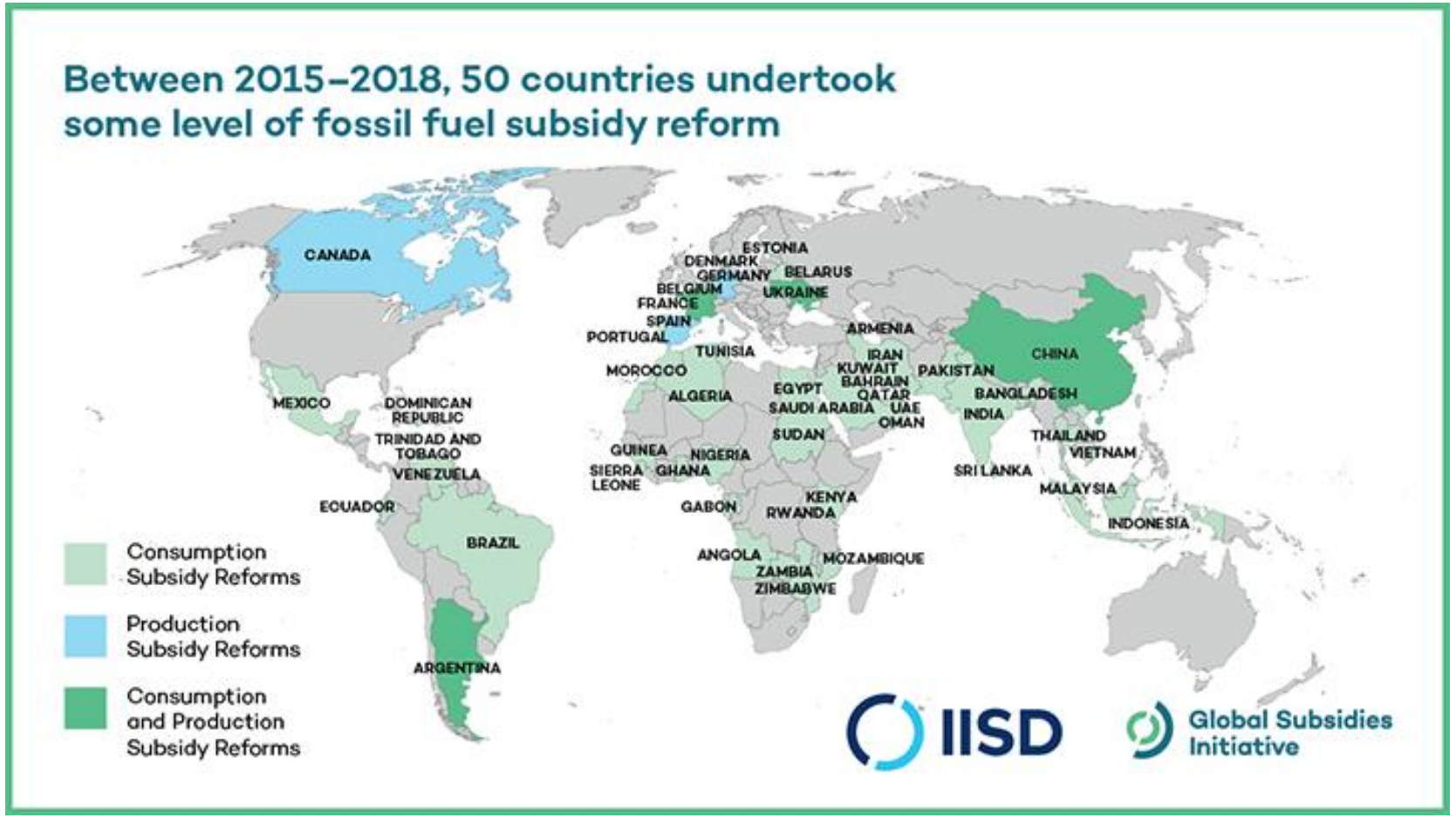
Global Subsidies Initiative

The gap


Global fossil fuel subsidies could finance the global energy access funding gap 7.5 times over.
$425
BILLION IN 2015
$56
BILLION PER YEAR UNTIL 2036
Fossil Fuel Subsidies
Universal Energy Access

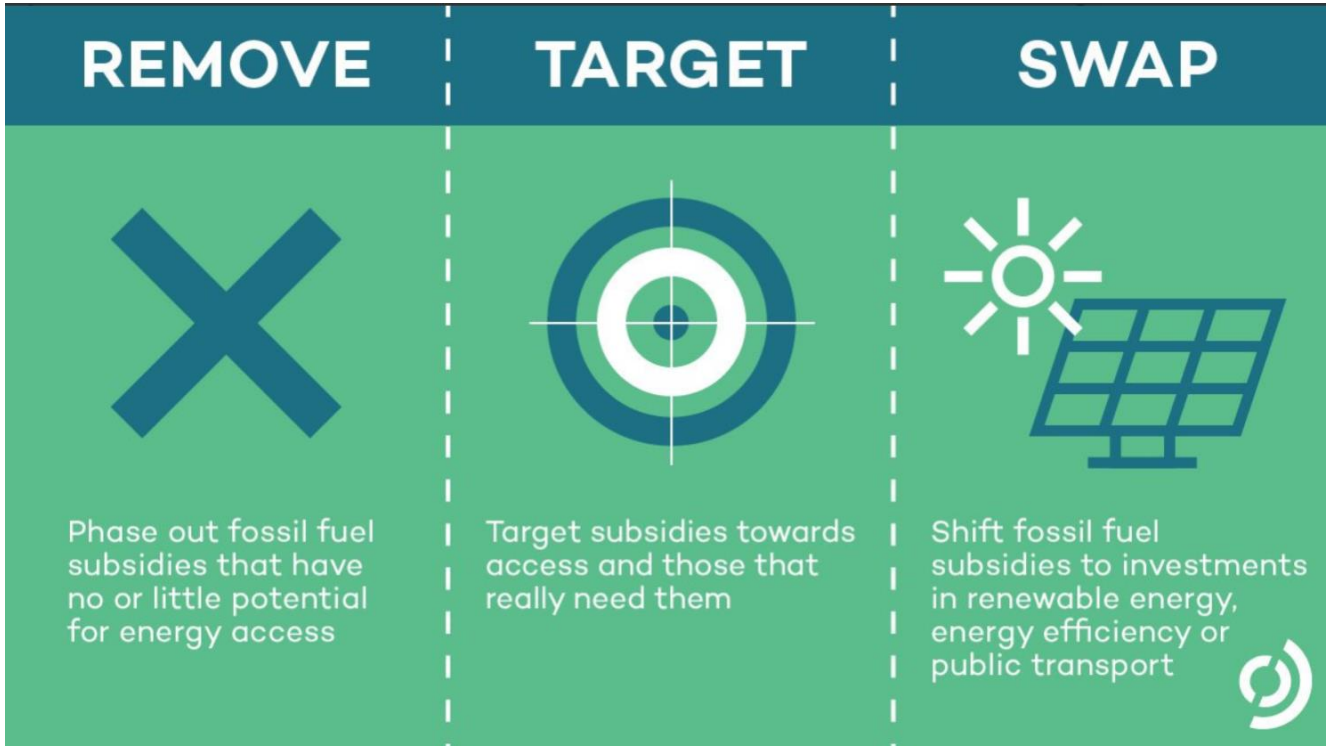
Energy subsidy reform

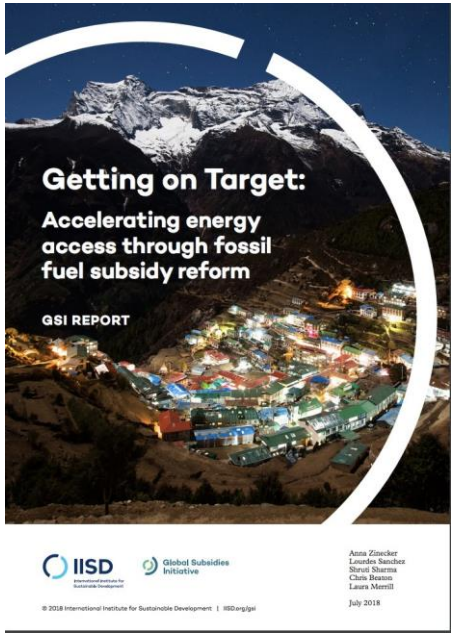
Many countries have initiated subsidy reform



Source: https://www.iisd.org/gsi/subsidy-watch-blog/fossil-fuel-subsidies-and-reform-on-the-rise

Opportunities for swaps





https://www.iisd.org/sites/default/files/publications/getting-target-accelerating-energy-access.pdf

GSI-IISD delivering the research to inform energy subsidy policy

1. How do **existing subsidy policies** impact the **welfare, productivity and empowerment** of women in low-income households?
2. How might the **welfare, productivity and empowerment** of women in low income households be impacted **through changes in subsidy policies and mitigation measures?**

2,442 household surveys undertaken in 2017

Data audits across four countries. Many FGDs in 3.

Bangladesh (kerosene)

Data audit

Focus Group Discussions

Primary Household Survey

Focus: Kerosene

Partner: BIDs

SS: 630

India (LPG)

Data audit

Focus Group Discussions

Primary Household Survey

Focus: LPG

Partner: IRADe

SS: 812

Nigeria (kerosene)

Data audit

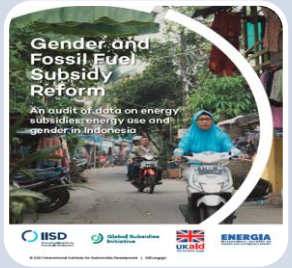
Focus Group Discussions

Primary Household Survey

Focus: Kerosene

Partner: Spaces for Change

SS:1000



Indonesia (LPG)

Data audit only

Focus: LPG

Partners: SMERU Research Institute and Universitas Gadjah Mada

Framing the Research Question

Impacts of Energy Policies on Women can be understood through a framework of: Welfare, Productivity and Empowerment (GETAT, 2010)

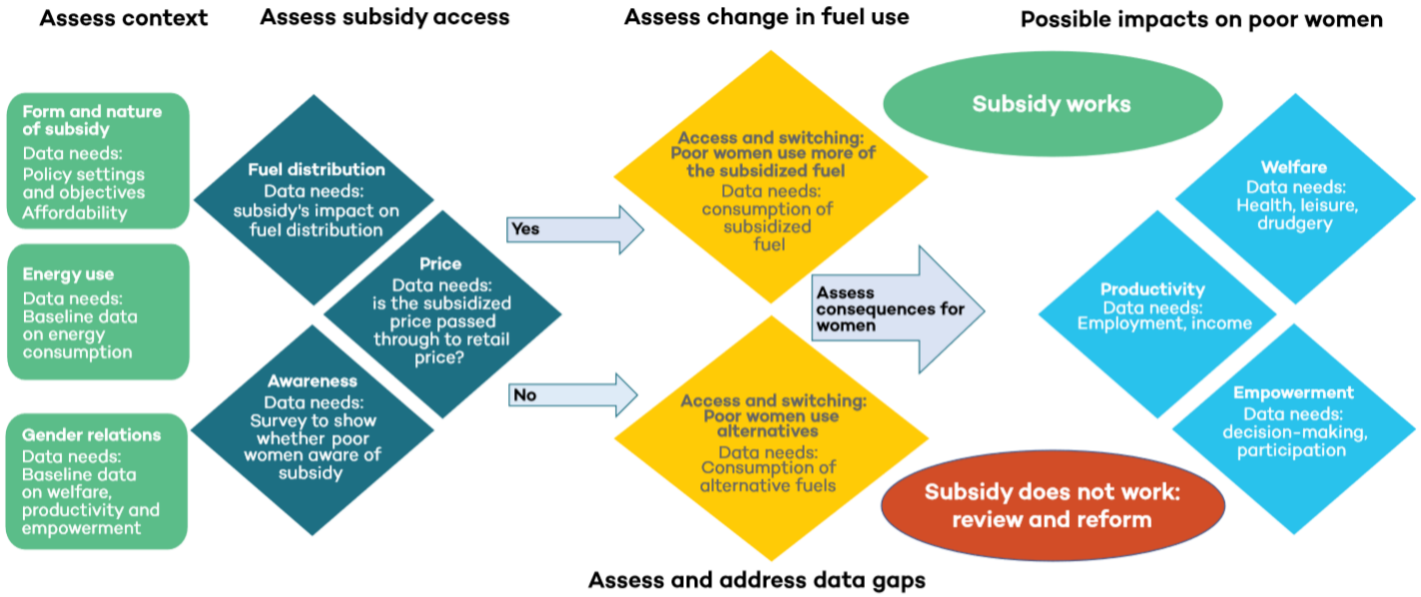


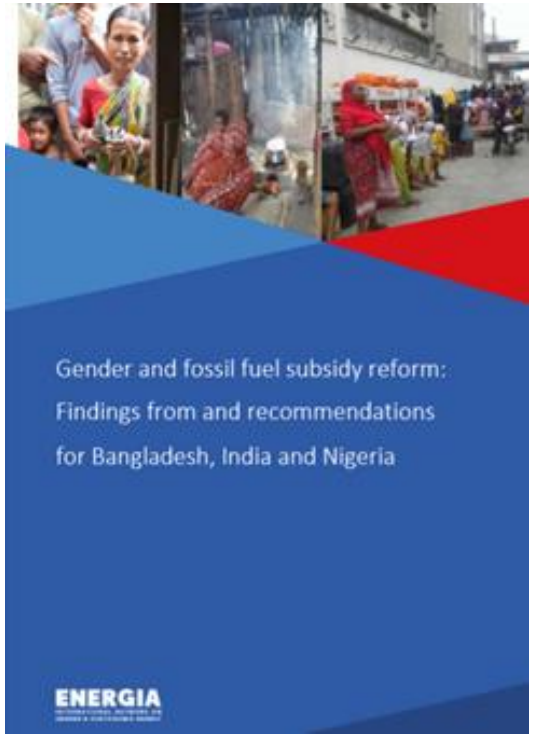
Figure 1. **Pathway of Causation from Fuel Subsidy Policy to Impacts on Women**

Source: Authors, simplified from Kitson et al., 2016

1. How do **existing subsidy policies** impact the **welfare, productivity and empowerment** of women in low-income households?
2. How might the **welfare, productivity and empowerment** of women in low income households be impacted **through changes in subsidy policies and mitigation measures?**

Publications

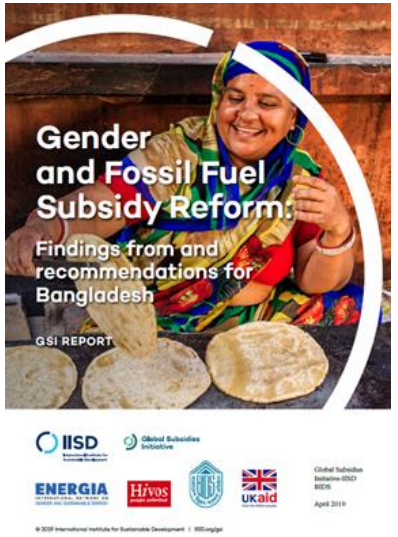
Kitson, L, et al. (2016), '***Gender and fossil fuel subsidy reform. Current status of research'*** http://www.iisd.org/library/gender-and-fossil-fuel-subsidy-reform-current-status-research



Global Subsidies Initiative-IISD, BIDS, IRADe and Spaces for Change (2019) ***'Gender and fossil fuel subsidy reform: findings from and recommendations for Bangladesh, India and Nigeria***', ENERGIA. https://www.energia.org/cm2/wp-content/uploads/2019/05/RA4_Gender-and-fossil-fuel-subsidy-reform_without-Annex-2.pdf

Country policy papers for
- Indonesia

Kusumawardhani, Hilman, Laan, Warda and Nurbani (2017) ***'Gender and Fossil Fuel Subsidy Reform: An audit of data on energy subsidies, energy use and gender in Indonesia'*** https://www.iisd.org/sites/default/files/publications/gender-fossil-fuel-subsidy-reform-indonesia.pdf



Country policy papers for
- ***Bangladesh***
- ***India***
- ***Nigeria***

Forthcoming
Available here: https://www.iisd.org/gsi/what-we-do/focus-areas/energy-subsidies-gender

Findings: Of impact of current subsidies for poor women…

Overall fuel subsidies are not working well for poor women:

a) **A large share of subsidies accrues to wealthier segments of the population**

b) **Subsidies do not guarantee lower fuel prices**—and may even create price premiums

c) **Subsidies can increase fuel scarcity** that can lead to long queuing for fuels and this burden often falls on women (e.g. Nigeria)

d) **Many low-income women cannot access fuels** that are currently subsidised (e.g. LPG in India)

e) **Fuel consumption subsidies alone are not effective at promoting the transition** to cleaner cooking or lighting fuels

Better targeting of fuel subsidies is needed and possible:

a) **Targeting subsidies to those that need them most** can counteract some of the problems outlined above

a) A **focus on connection over consumption subsidies** can encourage gender empowerment around decisions to purchase new cooking equipment for LPG and overcome upfront connection costs. For example, in India, the new LPG PMUY scheme aims to help women in low-income households afford the costs of using LPG for the first time.

a) **A gender focus can improve targeting and contribute to empowerment via clustering benefits towards women for multiple outcomes.** For example, India's PMUY scheme in India can only be used by female beneficiaries.

Findings: Of impact of higher prices and reforms for poor women…

Subsidy reform needs to be undertaken with care and mitigation measures are needed to protect poor women

a) **Price increases to subsidised fuels without any support measures could hurt poor women, especially where they are using subsidised cooking fuels.**

Other factors could be significant for fuel switching and better access to cleaner fuels for women:

a) **Education and awareness are key**;
b) Existing **patterns of decision making and purchasing power over energy choices** within the household need to be considered (educating men, as well as women, around energy choices, for example in Bangladesh);
c) **Improving the distribution system or electricity system**,
d) **Culture (tastes and preferences)** may still matter more (e.g. in Nigeria)

Investing in subsidy alternatives could empower women more directly:

a) More **diverse, technology-neutral, and subsidies conditional on outcomes** may be more effective in terms of achieving access, avoiding technology lock-in and fostering affordable solutions adapted to context;
b) Via **solar or grid electrification** (to replace kerosene subsidies); and
c) Into **social safety nets, health care, education or business loans** for women.

Gender Specific Findings

- Cooking is a gendered role and women still do most of the cooking in the areas surveyed.
- Different genders are in charge of decision making around fuel and lighting choices in different countries, and these choices are therefore context specific.
- Women want to access and use electricity.
- Different genders pay for different fuels in different countries and settings, and therefore this is very context specific. Price changes in fuels could affect the person purchasing or utilising the fuel directly, with gendered impacts.
- Women spend time fetching fuel and save time when there is fuel switching.
- A fuel price increase in cooking fuels such as kerosene or LPG can lead to reduced use of the fuel and switching, especially with some households reverting to biomass. This could impact women adversely in terms of lost time or health benefits gained from the use of either kerosene or LPG. This effect seems stronger in rural areas where households have access to 'free energy' like biomass.

Gender Impacts and Opportunities from Targeted LPG Cooking Subsidies in India

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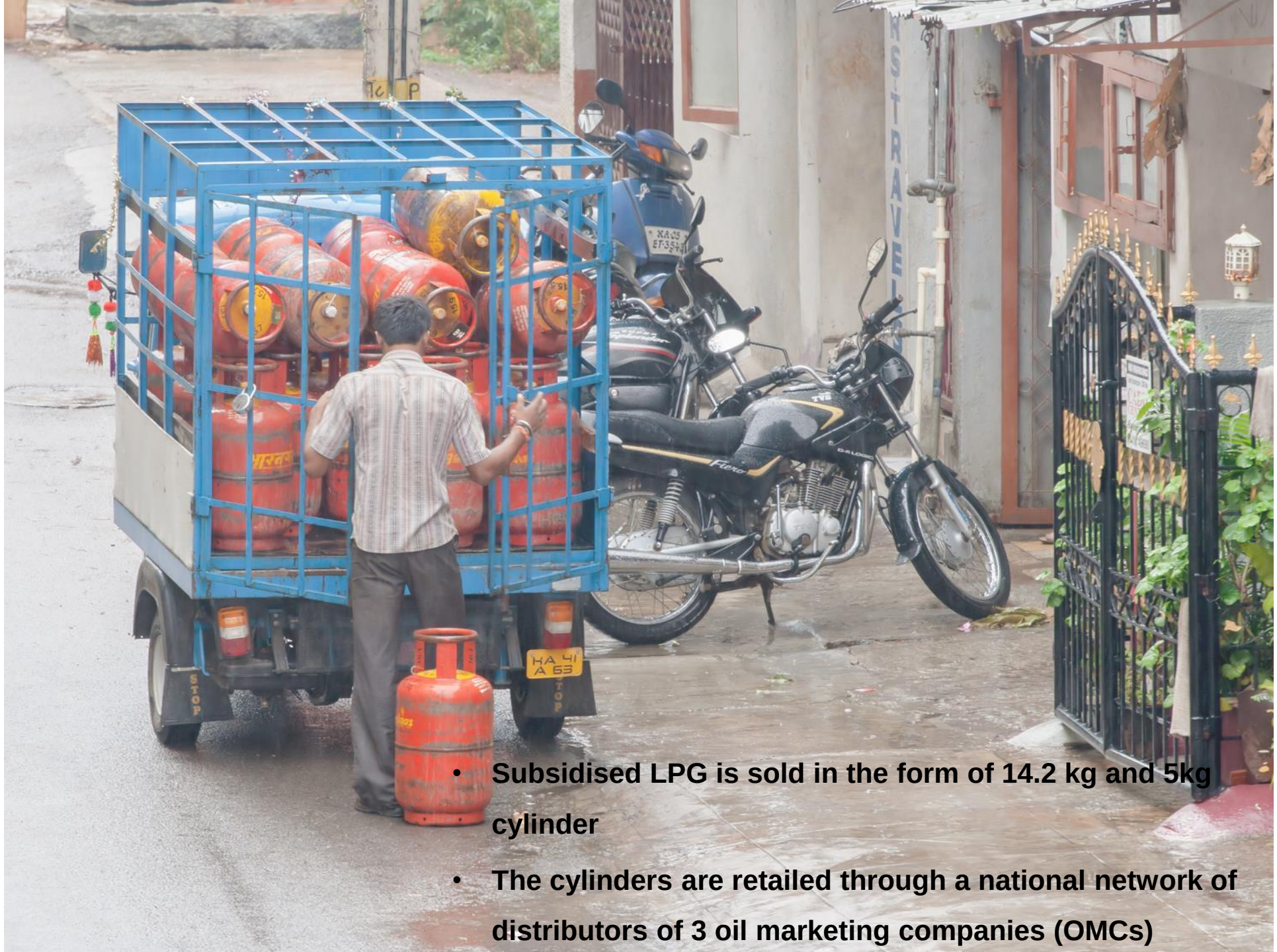
Country Context

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
	576,191	467,674	336,215	217,482	373,659
	9,524	7,648	5,136	3,242	5,798



- **Subsidised LPG is sold in the form of 14.2 kg and 5kg cylinder**
- **The cylinders are retailed through a national network of distributors of 3 oil marketing companies (OMCs)**

Country Context

Understanding India's LPG Subsidies: PMUY v/s PAHAL

	PAHAL (2014)	PMUY (2016)
Subsidy for	Consumption	Connection
Eligibility	Households earning less than INR 10 lakh annually (USD 14,285)	Targeted at Women from Poor Households
Subsidy Expenditure	In FY2018 INR 208,800 million (USD 3,242 million)	In FY2018, INR 24,960 million (USD 387 million)
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 Usage

Benefits from LPG Usage

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

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

Benefits from LPG Usage

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 70 percent of households having LPG connection said a male member cooked at least one meal in the last 30 days, against the 58 percent households who did not have LPG connection

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

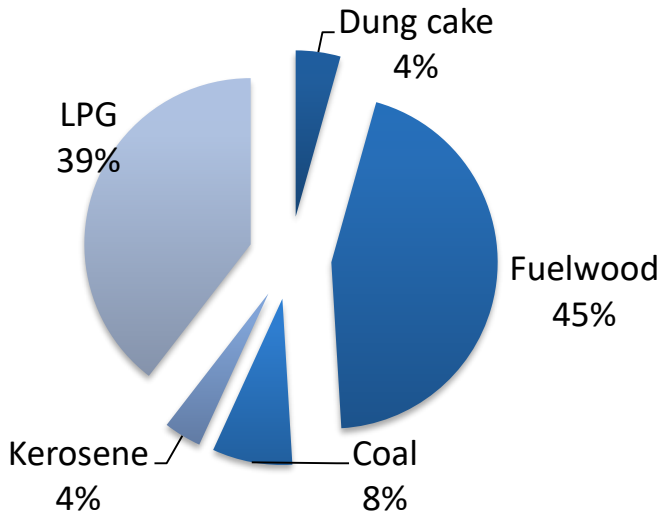
Limitations of LPG Subsidies

LPG subsidies only work for poor women who can access them

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

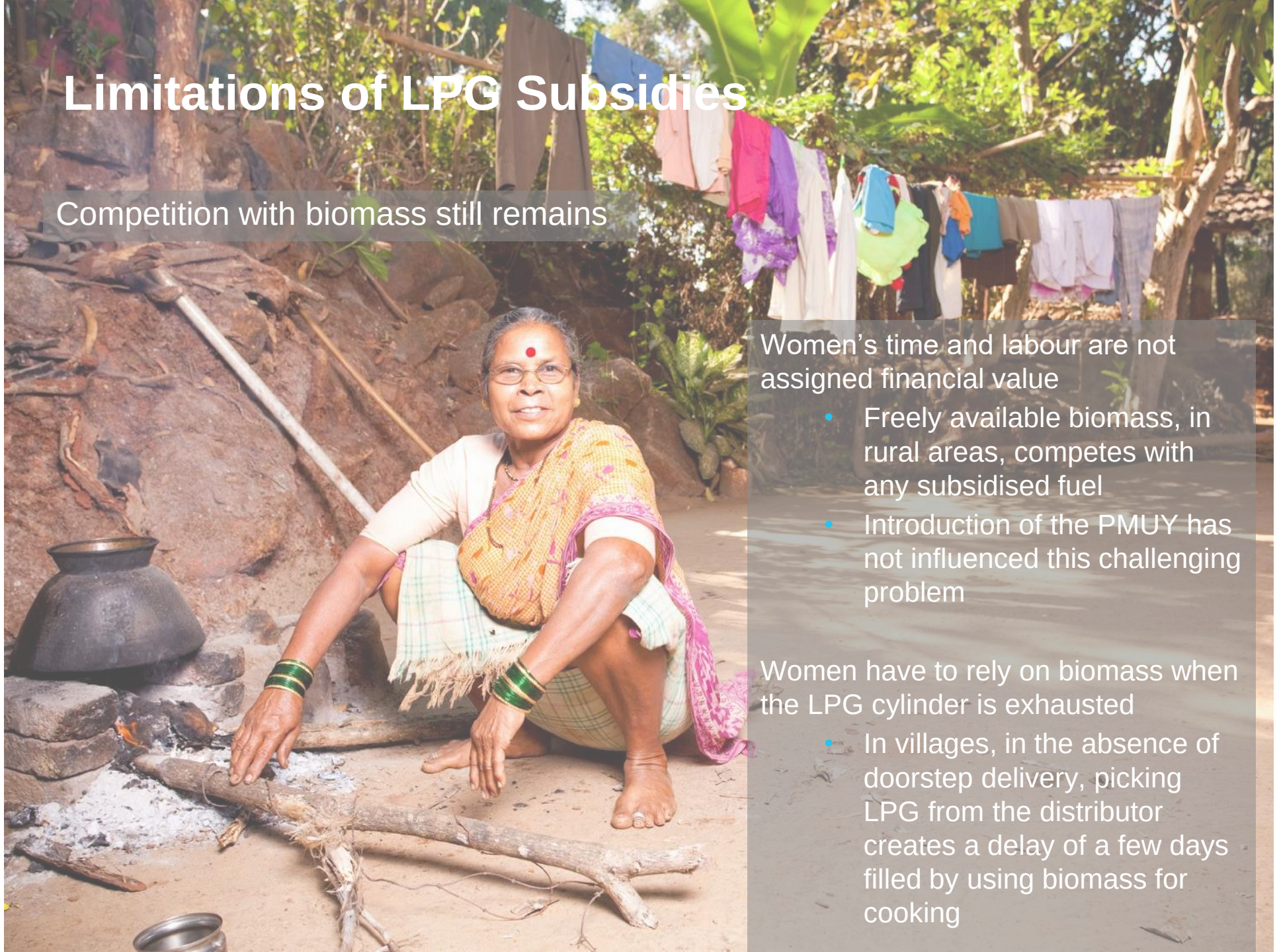
Benefits from LPG usage - time savings and reduced drudgery – are for poor women who can access LPG subsidies

Fuel Stacking prevents women from receiving health benefits that would arise from exclusive LPG usage



Fuel stacking: Average monthly cooking energy of 344 MJ per household sourced from different fuels for all surveyed households

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

Reviewing subsidy design and alternatives to subsidy

Better Targeting of LPG subsidies is needed –

- Redirect subsidy expenditure from PAHAL to PMUY: Expenditure on untargeted PAHAL subsidies is 8x than that on targeted PMUY subsidies
- Subsidy beneficiaries under PAHAL are largely non-poor households
- Even in PMUY there is a scope to improve targeting: 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

Thank You

Contact Us:

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https://www.iisd.org/gsi/what-we-do/focus-areas/energy-subsidies-gender

https://www.iisd.org/topic/gender

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Research Consortium Members and Team

Part of a wider consortium of eight research teams led by ENERGIA with funding from DFID, UK AID

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Spaces for Change (**Nigeria):** *Victoria Ohaeri*

SMERU Research Institute and Universitas Gadjah Mada (**Indonesia):** *Niken Kusumawardhani, Rafiazka Hilman, Nila Warda, Rachma Nurbani*

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Discussion session

Please use the chat function to submit your questions to the panel.

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3 October 2019

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