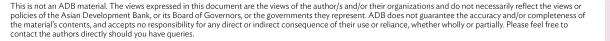
TRANSFORMING WOMEN'S LIVES THROUGH INFRASTRUCTURE

4-7 OCTOBER 2021, MANILA







The South Asia Women in Power Sector Professional Network

Towards Gender Equality in the Energy Sector:

Sharing World Bank Experience
from Energy Operations and WePOWER

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Gender equality is central to the WBG twin goals of ending extreme poverty and boosting shared prosperity

POLICIES INTERVENTIONS The Strategy **INFORMAL** builds on **INSTITUTIONS** ECONOMIC OPPORTUNITIES the WDR 2012 conceptual HOUSEHOLDS framework **MARKETS ENDOWMENTS AGENCY FORMAL INSTITUTIONS**

Men and women are not homogenous groups, rather, sex is one dimension of identity, along with race, ethnicity and disability, among others. Often these dimensions, combined with factors such as income level and location, can act as sources of disadvantage.

.	deprivation -→ binding constraint in women and girls' potential to fully ate and use assets, particularly their human capital.
and geo	nvestments, including the transition to renewable sources, such as solar PV, wind, thermal investments, can improve energy access, livelihood outcomes, including en, and enhance their skill-based employment – if set as a priority from the start
	genvironment – National energy access goals, as well as poverty reduction and clusion targets; Sustainable Energy for All objectives (universal energy access by
☐ Strong o	lemand for energy access, given existing disparities, esp. in Africa
. 0,0	of large increases in off-grid hh access to modern energy services); On and off- sequential, spatial, or a mixture of approaches, depending on policy priorities

Gender Impacts from energy access investments

<u>Direct Gender Benefits</u> → from improvements in:

- Women's time poverty (from reduced reliance on biomass sources of fuel);
- Health status, esp.of women, children from reduced indoor air pollution;
- through enterprise dev.and empl. solar ents.; construction jobs on large infrastructure projects);
- National energy agencies and utilities and private firms, on gender mainstream and women's formal sector empl. in energy value chains.
- Growing portfolio in off-grid renewable energy, and enterprise development for productive uses of energy in agric./ agroprocessing and services

Gender Entry Points in Energy

□ <u>Large-scale energy investments</u> – employment creation (esp. high-skill); fair resettlement; health/ safety; proactive SEA/SH; and consultative design for demand-side management for all users (men and women, producers, consumers) ☐ Key gender issues related to <u>pricing and affordability of services</u>, and <u>linkages to productive use applications</u>. Assessments of tariff (and subsidy) design on women's access to energy services; gendered preferences in energy efficiency in green buildings, incl. local on-site governance potential (as in ECA region district heating retrofits); outreach to men and women regarding metering; bridging information gaps ☐ Attention to role of women and men in the energy value chain E.g., Modern Energy Services for All - Haiti expanding CSO models of women's solar enterprises \rightarrow leveraging of <u>private sector financing</u> facilities ☐ Sweetening <u>investment terms</u> w/gender-specific criteria on procurement, employment met \Box Green jobs, STEM-led education and employment, particularly w/ Just Transition and decarbonization \rightarrow requiring broader dialogue among education, energy and social protection sectors in climate context

DATA: E.g., Sector-specific data points for project design; *Household energy access rate (incl. rural-urban); STEM skill levels;* National data on gender (overall) as input to understanding country's adaptive capacity

MTF Attributes for Electricity



MTF measures electrification through 7 key attributes.



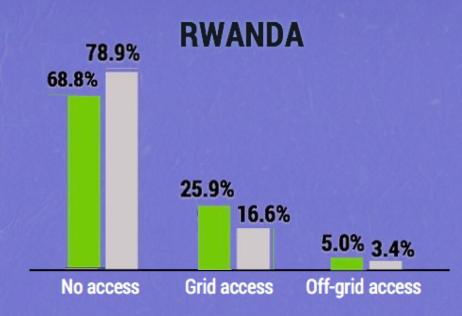


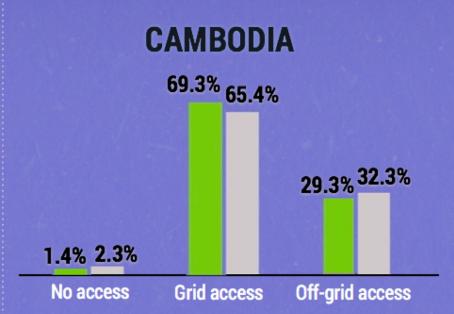


Male-headed households are more likely to be connected to the grid















Good Practices in Tariffs, Pricing and Outreach

- -Assess impact on vulnerable groups of expected tariff rates and consider preferential rates for those at risk (female-headed households, low income tiers) and hh connection costs
- -Understand intra-household gender division of labor on **household energy budgets**, responsibilities for payment (to better target outreach to consumers by utilities)
- -Consider use of **smart meters** to improve households' performance on energy use, and target men and women as appropriate in use of meters, bill reading; and bill collector jobs
- -Monitor share of female and male-headed households (as % of total female-headed and total male-headed households) that connect to the grid / receive financing for connections + monitor other social impacts (e.g., employment)
- -EVALUATE IMPACTS: women's time poverty; employment; income; health

Liberia Renewable Energy Access Project (P149683)

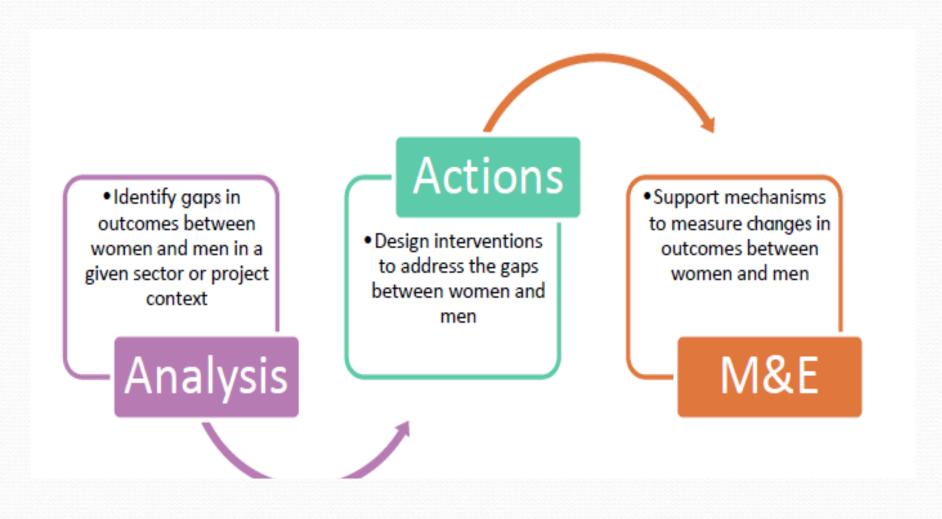
Included off-grid solar investments under USD 27m project

 Rural and Renewable Energy Agency identified opportunities for men and women in the development of mini-grids in Lofa County.

Approaches piloted include:

- Gender inclusive representation on the electrification committees
- Integrating women's productive uses of energy
- Making linkages to complementary social services
- Simplification of electricity connection procedures.
- Additional programming: Gender-informed national consumer assessments, and a retailer and consumer impact case study to look at demand-side issues

Integrating Gender into Operations (World Bank Gender Tag)



WB GLOBAL GENDER AND ENERGY PROGRAM: INDIVIDUAL OPERATIONS IN ALL 7 BANK REGIONS, 94 COUNTRIES - GOAL IS TO EXPAND WEPOWER PARTNERSHIP MODEL TO ALL REGIONS

GLOBAL GENDER AND ENERGY PROGRAMS

Women in STEM

Clean Cooking and Heating

Gender and Geothermal

Energy Efficiency, Gender and Behavior Change

Off-Grid Toolkit

ECA: 8 Countries

Scaling work on electricity subsidy reform and impacts of energy efficiency interventions on women and men, incl. in Tajikistan.

MENA: 6 Countries Research on energy poverty in relation to women's livelihoods and jobs in off-grid. EAP: 12 Countries & Pacific Power
Association (with 22 Countries, incl. SIDS)
Women's employment in solar and geothermal utilities.
Focused interventions on leadership, e.g.
Vietnam EDGE certification.

LAC: 8

employment in geothermal sector and enhancing female labor pipeline in SIDS.

AFR: 30 Countries

Women's employment program in utilities and work on productive uses of energy, esp. e.g., agricultural value chain development in off-grid sector.

SAR: 8 Countries

WePOWER launched and tackling the business case for utilities.



What is WePOWER?

A SAR Regional Professional Network for women in the energy sector

- Support higher participation of women in energy & utilities
- Foster increased retention and professional development of women in the sector
- Promote normative change on women and girls' participation in STEM-based employment

Why do we need WePOWER in South Asia?

- in energy utilities overall are low (3%-25%)
- Even lower for women working in technical roles (0.1%-21%).
- Most women in SAR
 energy sector in mid- to
 low-level non-technical (i.e.,
 administrative) positions.
- Low participation in STEM-based/ engineering education itself: Low female enrollment in engineering programs (0.5%-31%)



Large gender gap in women's employment in South Asia power sector

Afghanistan



Technical women: 14 Technical staff: 68



Total women: 281 Total staff: 9,367 Utilities covered: 1 (DABS) Bangladesh





Technical women: 304 Technical staff: 5,006

Women's representation by grade:



8% mid assistant female 8% senior positions female 5% junior female



Total staff: 22,919 Utilities covered: 6 Bhutan





echnical women: 414 Technical staff: 2,510



21.7% Total women: 894 Total staff: 4,103

Utilities covered: 4

India

*





8% female staff in 10 power sector organizations Total women: 4,106 Total staff: **51,198**

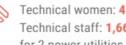


9% women in leadership positions such as director and chief engineer

Total women: 53 Total staff: 580 Utilities covered: 18

Maldives





Technical staff: 1,661 for 2 power utilities



female staff in 3 public utilities Total women: 663 Total staff: 4,350 Utilities covered: 3 Nepal





Technical women: 351 Technical staff: 5,664



Total women: 1,123 Total staff: 8,884 Utilities covered: 1 (NEA) Pakistan





Technical staff: 8,437



Total women: 2,226 Total staff: 61,993 Utilities covered: 8

Sri Lanka





Technical women: 147 Technical staff: 989



Total women: 3,280 Total staff: 25,727 Utilities covered: 1 (CEB)

8 baseline assessments across region:

- Data from over 100 energy and academic institutions.
- Over 500 women and men interviewed through FGDs and **KIIs**

Source: Data provided by HR in power sector organizations.

What does WePOWER do?

Removes barriers to women's energy employment in partnership with sector stakeholders (e.g., utilities; professional engineering societies):

 Provide female role models and mentors for students and professional women in STEM

 Connect STEM female students to professional energy sector

- Exposure to new ideas & professional dev.
- Networking opportunities for women in energy sector
- Support 'returning mothers' in re-entry to engineering workforce
- Activate gender-positive HR policies and facilities



South Asian Women in Energy









Policy and Institutional Change

























































Key Features

- Holistic Approach supporting female STEM students' transition and success as full energy sector professionals
- Regional Engagement (sharing best practices across SAR)
- Strong M&E/ Evidence-Based Framework (5 pillars)
- Partner-Driven (28 partners across 8 SAR countries; most major utilities in region are partners)
- Institutional Support from major development partners (WB and ESMAP, ADB, AusAID, USAID)
- Achievements: Over 20,440 women benefitting since 2019 through 1209+ activities held by partners (training, mentoring

Encouraging employment of women in Pakistan's Hydropower Sector

Setting targets and reporting...

- ✓ 2 women hired to senior positions at PEDO: Director, Environment; Deputy Director, Social Development.
- ✓ Targets: Hiring 15 women (30%) in senior Grade 17+ under project implementation unit
- √ 5 female graduates hired as Interns





Pakhtunkhwa Energy Development Organization (PEDO) activities under WePOWER:

- Host interactive sessions with female role models
- Partner with local universities for orientation sessions to female engineering students
- Establish a daycare facility, lactation rooms and separate prayer rooms



Achievements to date:

- Two regional conferences in Nepal (2019) and Philippines (2020); over 450 participants and 70+ organizations.
- Co-hosted by the World Bank and ADB.

Featured Activities			
Job hiring		266 women hired	
STEM workshops	61 workshops	3,665 female students	
Study tour/Field visits	18 tours	406 female participants	
Internship	_	424 female interns	
Professional Trainings	274 workshops	9063 female participants	
Mentorship	69 mentors	85 female mentees	
Women-Friendly Facility	242 facilities	_	

ENABLING FACTORS AND LESSONS LEARNED ACROSS THE SECTOR:



- Active communities of practice (internal and external)
- Testing models and disseminating good practice packages in upstream design
- Generating demand from clients by demonstrating linkages to countries' own policy ambitions on poverty reduction and gender











