A short history of WePOWER Network

Updates from the WePOWER Secretariat

Session 1
3rd WePOWER Regional Conference
A Short History of the WePOWER Network

February 2019: when it all began

11 utilities, energy companies and global / international institutions came together to:

- improve the number of – and the opportunities for – women engineers in SAR;
- make STEM education accessible to girls and women;
- make recruitment procedures; development opportunities; and retention strategies more gender-inclusive.

They were committed to policy and institutional change.
## Baseline Assessment - 2019

Number of women working in power sector or studying in engineering programs in SAR

(based on 2018 data)

<table>
<thead>
<tr>
<th>Country</th>
<th>Technical Women</th>
<th>Technical Staff</th>
<th>Women's Representation by Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Afghanistan</strong></td>
<td>21%</td>
<td>14</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Bangladesh</strong></td>
<td>6%</td>
<td>304</td>
<td>8% mid assistant female</td>
</tr>
<tr>
<td><strong>Bhutan</strong></td>
<td>16.5%</td>
<td>414</td>
<td>8% senior positions female</td>
</tr>
<tr>
<td><strong>India</strong></td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Maldives</strong></td>
<td>0.24%</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Nepal</strong></td>
<td>6.2%</td>
<td>351</td>
<td>5% junior female</td>
</tr>
<tr>
<td><strong>Pakistan</strong></td>
<td>4.6%</td>
<td>386</td>
<td></td>
</tr>
<tr>
<td><strong>Sri Lanka</strong></td>
<td>15%</td>
<td>147</td>
<td>8% female staff in 10 sector organizations</td>
</tr>
</tbody>
</table>

*Note: Numbers based on 2018 data.*
By November 2019 the Network doubled, growing to 21 WePOWER Partners

By 2021…

TOTAL WePOWER Results

- 2019 by 11 Partners
- 2020 by 24 Partners
- 2021 by 28 Partners

Total 1,465 Activities for 28,228 Female Beneficiaries

Some Featured Activities

- Job Hiring
- Study Tours/Field Visits
- STEM Outreach Workshops
- 328 Women Hired!
- 652 Female Students Joined
- 7,637 Female Students Joined
- 92 STEM Outreach Workshops

- Internship
- Workshops/Trainings
- Mentorship
- Women-Friendly Facilities
- 690 Interns Hired
- 11,156 Female Professionals Joined (interns, candidates, engineers/employees, returning mothers, etc.)
- 228 Mentees by 102 mentors
- 233 Women-Friendly Facilities/Services Built/Conducted

362 Workshops/training
This year, Partners aimed to implement **922** activities for **19,350** girls and women in South Asia, including **66** STEM Awareness sessions for **8,100+** female students.

**2022:** The WePOWER Network grew to 31 **Partners**, who:
- Hired **122** women;
- Hired **372** female students as interns;
- Mentored **543** girls and women.
Replicability – A Success

1. STEM Education to Work Transitions

2. Advancing Recruitment, Retention & Advancement

3. Promote Entrepreneurship and Financial Inclusion

Source: ILOSTAT, latest available data (accessed in January 2022)
Scalability – A Challenge

By 2024, WePOWER will have more than 50 Partners. All of them will be implementing several interesting initiatives. National Chapters are obvious response to manage the challenges that come with expansion and scale-up.
Updates and Announcements

1. WePOWER 2021 Award Winners

2. WePOWER Internship Module

3. WePOWER Trainings – Technical and Soft Skills

4. WePOWER Sustainability Strategy
   National Chapters
   • India – NPTI and ISA leading
   • Bangladesh
   • Bhutan
   • Sri Lanka

5. Communications Support to amplify Partner Successes

New Resources

• WePOWER Internship Module
• WePOWER Result-Sharing System
• WePOWER Website Update
• ADB Self-Reporting Tool
• WePOWER Gender Assessment Report

PLEASE SEE THE BOOTHs
# WePOWER Awards 2021

<table>
<thead>
<tr>
<th>Category</th>
<th>Award Name</th>
<th>Company/Authority</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner of the Year Award</td>
<td>Highest Students Outreach Award</td>
<td>WAPDA</td>
<td>Pakistan</td>
</tr>
<tr>
<td></td>
<td>Recruitment Award</td>
<td>TATA POWER-DDL</td>
<td>India</td>
</tr>
<tr>
<td>Professional Development Award</td>
<td>Highest Retention Award</td>
<td>EESL</td>
<td>India</td>
</tr>
<tr>
<td></td>
<td>Rising Star Award</td>
<td>Karachi Electric (KE)</td>
<td>Pakistan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Druk Green Power Corporation Limited (DGPC)</td>
<td>Bhutan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fenaka Corporation Limited</td>
<td>Maldives</td>
</tr>
<tr>
<td>Individual Achievement Awards</td>
<td></td>
<td>Grameen Shakti</td>
<td>Bangladesh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Sohel Ahmed</td>
<td>Bangladesh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr. Tshering Choden</td>
<td>Bhutan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Himali Zayra</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceylon Electricity Board (CEB)</td>
<td></td>
</tr>
</tbody>
</table>
Regional Working Group

- **Grameen Shakti**
  Mr. Sohel Ahmed

- **DrukElectricity Supply Organization (LESCO)**
  Mr. Noman Ahsan

- **The Water and Power Development Authority commonly (WAPDA)**
  Ms. Mariam Sibtain

- **IEEE WIE Sri Lanka**
  Dr. Akila Wijethunge

- **Green Power Corporation Limited (DGPC)**
  Ms. Tshewang Lhamo

- **Bhutan Power Corporation (BPC)**
  Ms. Tshering Choden

- **POWERGRID**
  Ms. Priti Nahar

- **Feedback Energy Distribution Organization Ltd. (FEDCO)**
  Mr. Samarjit Mohanty

- **Pakhtunkhwa Energy Development Organization (PEDO)**
  Mr. Javid Khan Lahore
Welcome to the WePOWER Result-Sharing System.
ADB’s Gender Self-Assessment Tool for Energy Utilities

Design aims to enhance application usability across a variety of mobile devices.
Our Objectives for the Conference

Consensus
• Key Concepts and Attributes needed to support recruitment/retention/development of women
• Need to act together to develop a diverse workforce for the future

Knowledge Sharing
• Solving key barriers to implementing specific gender actions
• Best Practices with Sister Organizations in other regions

Sustainability
• Establishing National Chapters
• New Steering Committee Members
• New systems (WePOWER Result-Sharing System)

Commitment
To implement immediate, practical and innovative solutions to implement and scale-up gender activities.
Launch of WB Report: Engendering Access to STEM Education and Careers in South Asia

Presented by Ms. Shobhana Sosale, Senior Education Specialist, World Bank

Reflections by Dr. Rashi Gupta, Founder & Managing Director of Vision Mechatronics Private Ltd.
About the Report

<table>
<thead>
<tr>
<th>Access to STEM and Gender Segregation</th>
<th>Aspires to improve understanding of the barriers to and ultimately address the gender segregation in access to and participation in STEM in South Asia.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A hybrid multidimensional framework</strong></td>
<td>Applies a hybrid multidimensional framework to help explain the motivations for access to STEM education. Utilizes the framework to assess how South Asian countries fare on access to STEM education, identify gaps, and offer recommendations on how access challenges can be addressed.</td>
</tr>
<tr>
<td>Multidimensional elements and influencers</td>
<td>The key elements affecting learners are language and skills, self-efficacy, self-perception, stereotypes and STEM identities, interest, engagement, motivation, and enjoyment. The role of family and peers combines peer relations, parental beliefs and expectations, household assets and support, and family characteristics</td>
</tr>
<tr>
<td>Multidimensional elements and influencers</td>
<td>The role of schools combines psychological factors linked to assessments, STEM equipment, materials, and resources, student interactions, teacher-student interactions, teacher perceptions, female teachers, teaching quality and subject expertise, teaching strategies, textbooks and learning materials, and assessment procedures and tools.</td>
</tr>
<tr>
<td>Multidimensional elements and influencers</td>
<td>The role of society combines equal pay legislation, gender equality policies and laws, mass and social media, sex-disaggregated data for policymaking, societal and cultural norms, gender equality, and inclusive gender norms.</td>
</tr>
</tbody>
</table>
# Methodology

## STEP-ping up Lifecycle Scientific and Technological Knowledge and Skills for productivity, innovation, and growth

<table>
<thead>
<tr>
<th></th>
<th>Pre-school age</th>
<th>School age</th>
<th>Youth</th>
<th>Working age</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5</strong></td>
<td>Facilitating labor mobility and job matching</td>
<td></td>
<td>Apprenticeships, skills certification, counseling</td>
<td>Intermediation services, labor regulation, social security portability</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Encouraging entrepreneurship and innovation</td>
<td>Fostering inquiry (scientific and technological)</td>
<td>Universities, innovation clusters, basic entrepreneurship training, risk management systems</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Building job-relevant skills</td>
<td>Basic technical and vocational skilling, behavioral skills</td>
<td>Technical and vocational skilling, higher education, apprenticeships, targeted programs</td>
<td>Firm-provided training, re-certification, re-skilling</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Ensuring that all students learn</td>
<td>Cognitive skills, socialization, behavioral skills</td>
<td>Second chance education, behavioral skills</td>
<td></td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>Getting children off to the right start</td>
<td>Nutrition, psychological and cognitive stimulation, basic cognitive and social skills</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Adapted from World Bank 2010*
Methodology

• **Objective**: help initiate dialogue among South Asian countries to explore areas for collaboration and potential investments in this important area.

A situational analysis of the access, participation and performance of females in STEM subjects in primary, secondary, and tertiary education, including technical and vocational education and training (TVET), and at University.

Female participation in the labor force with a focus on STEM careers.
The Global STEM Labor Market: Education’s Evolution and Stagnation

- Benefits in STEM Advances must represent all of society
- Factor diversity: Countries of origin, ideas, concepts, solutions
- Embrace that scientific knowledge deliver to society
- Embrace that technological knowledge deliver to Society
- Globally, ¾ men and less than half women are in the labor force
- Wage and salaried: 14% women, 24% men
- Women in the labor force part-time by choice and involuntarily
- Unemployment rates for women consistently above that for men
- Gender-based pay gaps persist, widens at higher levels of employment
- Beyond traditional scope of a STEM career, increasing demand for digital skills
- No consistent definition of “STEM” career

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No consistent definition of “STEM” career
## The “leaky pipeline”

<table>
<thead>
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<th>“Leaky pipeline”</th>
<th>Critical component of that education is STEM.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Here, girls’ participation and continuation rates fall with age and education in South Asia and around the world.</td>
</tr>
<tr>
<td></td>
<td>Results in girls and women showing increasing disengagement with STEM in secondary and postsecondary education—and ultimately in jobs and careers.</td>
</tr>
</tbody>
</table>

### In South Asia the main leaks in the pipeline for females occur in

<table>
<thead>
<tr>
<th></th>
<th>Not enrolling in science in upper secondary education.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not entering STEM programs in postsecondary education:</td>
</tr>
<tr>
<td></td>
<td>About three-quarters of STEM students are male.</td>
</tr>
<tr>
<td></td>
<td>And among the remaining quarter, 70 percent of female undergraduate STEM students are in health sciences.</td>
</tr>
<tr>
<td></td>
<td>Not joining the workforce. In many South Asian countries women’s labor force participation is much lower than men. Moreover, educated women are more likely to be unemployed.</td>
</tr>
</tbody>
</table>
### Key Observations from South Asia

**Primary and Secondary Education**

South Asian countries have made major advances on school enrollments in recent decades, and the gap in the gender parity index has narrowed significantly.

Despite attrition in enrollments as children reach secondary school age, girls’ dropout rates have fallen substantially.

Boys and girls perform at similar levels academically, and in many countries in the region that includes mathematics and science for all age groups.

Focused science and mathematics tracks typically become available in upper secondary education, though the availability and quality of these tracks vary considerably by country.

Girls are underrepresented in science and mathematics tracks in upper secondary education, reflecting the lack of access and less interest in STEM education and future careers. This phenomenon, observed globally, is sometimes referred to as the “leaky pipeline.”

Girls in science tracks are often focused on health careers, shrinking the talent pool available for other STEM disciplines.

Girls’ performance in science tracks is similar to that of boys.

The quality of teaching and learning—especially in science and mathematics—remains a concern. Where data are available, science and mathematics performance in South Asia lags global averages.
Key Observations from South Asia

Technical Vocational Education and Training (TVET)

Females are significantly underrepresented in technical programs in South Asia (as globally), with even wider disparities in STEM offerings.

STEM-focused technical education is generally perceived as being geared toward males.

A perception remains that overall TVET programs are a second-choice option for further education.

Yet globally, many STEM jobs require technical skills.
University enrollments in South Asia have jumped in recent years, and the region’s gender parity index for universities is increasing.

Women are underrepresented in engineering and technology disciplines. This trend continues the “leaky pipeline” observed in science tracks in upper secondary education, coupled with large shares of female STEM undergraduates pursuing health-related degrees.

Female enrollments in STEM fields vary by country in the region, but the overall trends are consistent with global trends.

The quality of STEM education available to many university students is a concern.

Employers note a skills gap between university graduates and job requirements.
Key Observations from South Asia

- **Significant disparity in female labor force participation between SA and globally**
- **Exacerbates** the STEM “leaky pipeline” observed in education
- **Better-educated women** are less likely to work
# Potential Interventions for South Asia

## Multidimensional approach

- **Family and peers, societal norms and pressures, and education considerations**
  - An integrated, systematic approach that provides students with the skills and motivations to pursue STEM fields
  - Explicitly focuses on addressing the “leaky pipeline” for girls and women that hinders the diversity crucial to a robust STEM sector.

## Learning Skilling Earning

### Sectoral outreach
- Systemic support to foster girls’ education to remain in lower and upper secondary education

### Support for STEM outreach
- Planning and enrolling in tertiary education

### Corporate and sector outreach
- Entering and early years in the labor force (including for those not currently entering the labor force)