“Sustainable Energy and Gender Empowerment Case of Lebanon”

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Lebanon - A Small Country, Free Market Economy

Dominated by Small and Medium Enterprises (97%) employing 51% of the total workforce in Lebanon;

An Economy highly dependent on Services sector: IT services, Tourism, Banking, financial services Trade- Contributing to 60% of the GDP and 73% of the labor force (IDAL, 2018);

A well developed entrepreneurial scene: 30.7% self-employment as per CAS 2009;

Productive Sectors such as Agriculture regarded as main source of income for Rural areas- 50% of the population;

Gender wise, Lebanon ranks 140 out of 149 in the World Economic Forum’s Global Gender Gap Index 2018: Women participation in the labor force is low; three times less likely to participate than men.

Moreover, 83% of women working are wage-employed and only 17% are self-employed compared to 43% for men in the same category. (MoSWEE, 2019)
Over 8% of Lebanese Population Residing in Urban Areas- Need for RE

Half of the Urban Population are living in Capital Beirut and its surroundings;

Based on Energy Vulnerability Study- 56% of population reside in cities and will increase to 68% by 2050;

Main impact of such increase: Reduced access and availability of water, food, and energy, along with environmental degradation and pollution

Rural Areas will be most affected in terms of access to energy; negatively impacting economic performance: Leading to poor living standards and lower quality of life
Renewable Energy Account for 4% of Total Electricity Production in Lebanon

The Overall Picture

PV-based electricity generation and water heaters are an increasingly attractive alternative to diesel-based back-up generators to help households cover chronic disruptions to power supply and reduce bills.

Government Commitment to increase RE sources to 12% by 2020: Embedded National Energy Efficiency Action Plan (NEEAP) for 2010-2015 and National Renewable Energy Action Plan (NREAP) 2016-2020. Climate change Commitment Intended Nationally Determined Contributions (INDC)- to increase the percentage to 15% of RE by 2030, and 3% reduction in power demand through energy efficiency

More Government Commitment in 2018- New Target of 30% of the nation’s electricity and heat in 2030 to be soured from renewable energy.
Shift to Reliance on RE impacts gender differently: To what extent this is taken into consideration in the different governmental policies and actions adopted or planned?

<table>
<thead>
<tr>
<th>UN Women Study in 2012: Large gender gap in the energy sector- women accounted for less than 6% of technical staff and only 1% of top managers;</th>
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<tr>
<td>International Renewable Energy Agency (IRENA) 2019: women’s global share in employment accounting for only 32% of the renewable energy workforce- under-representation of women and inequality in access to such jobs between men and women in the sector,</td>
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## Gender Equality in Lebanon, Relevant to SDG5: Empowering All Women and Girls

<table>
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<tr>
<th>High Educational Attainment</th>
<th>Health and Survival</th>
<th>Political Empowerment</th>
<th>Economic Participation and Opportunities</th>
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<tbody>
<tr>
<td>• 74.7% Primary Education Compared to 82.5% males</td>
<td>• Higher Life Expectancy: 66.8%, 65.5% males</td>
<td>• Weakest Participation of Women</td>
<td>• Still Low despite Higher Education Attainment</td>
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<td>• 32.5% Secondary Education (33.4% males)</td>
<td>• But Gender Based Violence Still Prevalent: 35%</td>
<td>• Women in Parliament: only 3.7% (WEF, Gender Gap 2018)</td>
<td>• Occupy low positions and lower paid jobs: only 5% reach top management</td>
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<td>• 45.8% Tertiary Education (39.6%)-2014</td>
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<td>• Women in Ministerial Positions (3.4%) but some change (4 new ministers)</td>
<td>• Higher Unemployment rate: 18% compared to national 11%</td>
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<td>• No representation at higher level</td>
<td>• Women 3 times less likely to be employed than men</td>
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# National Policies to Reduce Inequality

## The National Commission for Lebanese Women (NCLW)
- Established in 1998 - Gender Mainstreaming in Public Institutions
- Support for Gender Mainstreaming - Appointment of Gender Focal Points in Ministries
- Support for Appointing 6 gender audits nationwide

## Ministry of State for Women Affairs
- **Set up in 2016** - Focused on Achieving SDG5 7 SDG17
- Renamed in 2019 to Ministry of State for Women’s and Youth Economic Empowerment
- Developed, with support of World Bank, 5 years strategy focused on economic empowerment of women and youth

## Prioritizing Economic Growth Opportunities
- Capital Investment Plan - CEDRE Conference, 2018, investment in infrastructural upgrading and productive sectors including renewable energy
- Entrepreneurship Support through SME Strategy - ICT and Creative Sectors
Evaluating Impact of Such Policy Interventions on Women in Energy Sector- Major Gap in Statistics

- **Gender Statistics Gap**: Gender statistics on energy access are unavailable, be it at policy or local level- World Bank Indicated (2018): only 20% students are enrolled in renewable energy or energy efficiency studies, and 12% in general energy programs. Gender wise, there is more women participation in renewable energy and energy education programs, around 47% as compared to 25% in petroleum studies.

- **Absence of Data on Employment in Energy-Gender Level**: Particularly in relation to women participation, at rural and urban level, employment or Self-employment

- **No Official Classification**: Occupations and positions available within the renewable energy sector by gender

- **Gender mainstreaming recently adopted through assigning gender focal point** at the Ministry of Energy and Water, but concrete actions to ensure equal access and benefit among gender to renewable energy sources are not fully planned or exploited – No Official Statistics to Form Base for Developing Interventions
The Situation Today: Weak Women Participation in Renewable Energy – Looking at Key Influencing Factors

- **Stronger Influence on Rural Women** - face several key gender issues associated with energy service’s needs, ranging from access to energy to participating to actually benefiting in the energy sector.

- **The access to energy** affects the time spent, health issues, and livelihoods of women in general, be it in urban or rural areas.

- **Participation** is more related to equal opportunities for livelihood in the sector, availability of training and capacity building, availability of business development services, and interest of women to join the sector.

- **Control/Benefit** is more related to the capacity of women to advance in the sector and take on leadership positions.

- **Various Challenges Exist that Affect Women Access and Participation in Various Economic Sectors, and some particular to the Energy Sector**
Legal Barriers

• Absence of perceptible laws and policies that support women in the labor force, and equal access to energy
  • Law Ratifications but still presence of Restrictive Articles
• Article 9 of the Personal Status Law: Constitution delegating full power to the religious communities to apply their own laws whether discriminatory or not-inheritance, children custody, divorce and marriage- Limiting Access to finance
• Absence of Minimum Age for Marriage- At expense of Professional Development/education
• No specific legislation pertaining to rural women in the Lebanese Labour Law- No access to National Social Security Fund-75% of Rural Women Workers in Agriculture hired informally

Limited Access to Financial Resources

• Influenced by the Inheritance Law, which in most cases denies women the right to ownership of land.

• Women in Lebanon still face obstacles to get collateral or a guarantor for loans especially in rural areas

• Facing legal finance restrictions or difficulties in taking actions without a man’s consent, discouraged from engaging in businesses.
Lack of STEM Education - Main Challenge Hindering Participation

**Lack of Stem Education for Women**
- Global Challenge but stronger in Lebanon
- Decrease in female enrollment numbers in STEM majors, compared to overall enrollment numbers: 10% in public universities, 14% in private
- Limited Awareness and Orientation - 40% of Agriculture Labor Women - no awareness

**Limited Access to Technical training skills and capacity building trainings**
- Lack of technical skills that would improve their access to renewable energy sector
- Training centers, Incubators not widely available or accessible for women, particularly rural women. Incubators mostly in urban areas.

**Lack of Awareness on Opportunities in Renewable Energy Sector**
- Prevailing perception - energy sector not appropriate for women, tracing it to social and cultural norms
- Rural women lack self-confidence and beliefs-susceptible to cultural barriers (stay at home)

**The dominance of the male figure in the renewable energy sector**
- Small number involved in renewable energy sector, mostly in the head office: administrative or customer service roles.
Lack of Role Models and success stories inspiring for Women Given limited participation in Sector

Lack of Mobility and Flexibility - in terms of working hours required, and mobility to travel to different locations for installation and maintenance - Family Prioritization, Safety

Lack of Access to technology
- In RE, women are end-users rather than partners in design and installation
- Unaware of small-scale technologies at the household or commercial level - impacting Market Access
## Opportunities- Entry Points for Further Promoting Women Participation in Renewable Energy- Rural Level

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| **Energy Efficiency in Processing Facilities**| • Initiatives supporting Installation of PV systems at coops for Improving Productivity  
• Women cooperatives present a large entry point in rural areas- create success stories for other businesses, and increase job opportunities |
| **Opportunities through Solar Photovoltaic (PV)-** | • Decentralization of the power supply- more women potential in head office as start                                                                                                                        |
| **Opportunities through Wind Energy**         | • Rural areas : can provide employment opportunities for people- especially for women, within the framework of Corporate Social Strategy                                                                                                                                 |
| **Opportunities through Bioenergy**           | • Potential synergies with other sectors such as forestry, solid waste management and water treatment  
• Women Potential Contribution: in various stages from processing technologies to marketing end products such as other bioenergy carriers, power and heat |
| **Indirect Opportunities**                   | • Improved Participation in Rural Tourism and Agro-Food Processing                                                                                                                                                                                                                                                                 |
What Should be Done to Improve Participation of Women in Renewable energy Sector? - Main Recommendations

- Improved Counseling and Orientation towards STEM Education for Young Women Starting At School- Special Focus for Rural Areas

- Awareness Campaigns on Renewable Energy Sources and Technologies: Highlighting how women can integrate and contribute to the advancement in this sector.

- Support the Establishment of Rural Incubators: specifically for renewable energy, a one-stop shop, providing potential entrepreneurs with opportunities to test their ideas and acquire technical support.

- Working closely with financial and micro-finance institutions to improve financial access of women
More to be Done at Policy Level - Main Recommendations

National and trans-national dialogues on the need for change in social norms: continuous dialogue and exchange of experiences

Research and research-based advocacy on gender justice: a platform required for launching evidence-based research on gender issues within the renewable energy context, main base for future plans.

Conscious and concerted efforts towards a gender-responsive shift in policy and practice: Whilst this exists currently, need to further strengthen and make it more effective in application, through exploring the synergies between these two topics.

Integration of renewable energy access to women’s productive sector: highlighting monetary and environmental benefits of using renewable energy to reduce operating costs- financial incentives for rural areas- speed up the adoption of renewable energy.
Create a Favorable Environment for Economic Growth - Women Leading and Generating Positive Renewable Energy!

Thank YOU