

MSSRF Gender Energy Network India Workshop on

Gender and Energy: Energy linkages with Gender, Productivity and Inclusivity

26 April 2018, Chennai



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Summary of the

MSSRF Gender Energy Network India Workshop on

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Inaugural Address: Professor M. S. Swaminathan

The inaugural address was presented by Professor M. S. Swaminathan, who highlighted the importance of considering gender within energy discussions, particularly those around agricultural energy. Professor Swaminathan emphasised the importance of considering human energy as well as other forms of energy, particularly given that so much of the manual work done in farming is done by women. He went on to discuss energy management as an aspect of production, where women's energy has been dominant, but we now need other forms of energy. This will require a translation of technology, particularly in the agriculture sector, to reduce time and energy poverty. He highlighted the importance of both participatory research and anticipatory research, in ensuring communities, particularly marginalised members, are prepared for unanticipated climatic events and can plan in such a way that increases resilience during the good times in preparation for harder times.



Session I: Gender perspectives in energy policy

Moderator: Soma Dutta, ENERGIA

Soma Dutta introduced ENERGIA as an international network focusing on gender and sustainable energy. ENERGIA has programmes in 35 countries and works with over 4000 women entrepreneurs and enterprise groups, utilising clean energy technologies. Soma spoke about India's move to universal village electrification and wide-reaching LPG connections, which have shifted energy narratives away from simply access to energy, to discussing how

to facilitate meaningful energy access with gender perspectives. Soma discussed the focus on large scale renewables, which often have resulted in large scale displacement of farmers, of whom a significant proportion are women, reminding us that renewables are good, but they need to include focus on social and gender issues. A low carbon development pathway for India needs to integrate gender and social aspects. She also highlighted the changing discourse around energy, where distribution companies are seeing it profitable to engage woman as part of the solution to distributing clean energy.

Soma introduced the panellists in the session, who are presenting research supported by ENERGIA in the ENERGIA Gender and Energy Research Programme Framework, a five-year sub-programme on “Gender and Sustainable Energy for All”, supported by DFID.

Can energy be a game changer for women’s empowerment? - Mini Govindan, TERI

Mini Govindan presented findings from the *Exploring Factors that Enhance and Restrict Women’s Empowerment through Electrification* (EFEWEE) research project. This project explores not just the linkages between electricity and empowerment, but also the nuance of how and why it happens. The paper presented key findings from grid and off-grid electrification projects in Chhattisgarh and Bihar. The primary outcomes of the study were improved quality of life and reduced drudgery. However, the study found that gendered access to electricity was very much shaped by traditional cultural norms. For instance, where women are given opportunities for work, cultural norms often prevented them from



exploiting these opportunities. In areas where the studies had taken place, there was little change in the priorities for girls to get married, men still took household wide decisions and male children were still celebrated over female children. Mini concluded that while electricity is important, it alone cannot be a game changer, and needs to be supported by wider legislative and social and cultural shifts.

Gender and clean energy in production and social reproduction spheres, Dev Nathan, MSSRF

Dev Nathan followed Mini’s presentation to ask if a game changer is needed to change ‘access’ to clean energy into ‘use’ of clean energy. Dev cited the programmes designed for universal LPG access, but pointed out the lack of demand for refills, particularly in poorer states, suggesting that LPG is used as a secondary fuel in a fuel stacking setup. This does little to mitigate the health issues, environmental degradation, time poverty and drudgery associated with biomass fuels. Dev asserted that women need to be empowered so they can

utilise clean energy, which will require a change of social norms that needs to be accelerated. Dev referenced some of the norms which changed with Swachh Bharat, where women in many areas refuse to marry into families without indoor toilets. He said LPG needs to become a similar commodity. Barriers to this include the gender bias in decision making, where 'men's goods' such as motorcycles carry greater status and priority, and gendered norms that exist where women are expected to use spare time to collect fuel.

Transition to clean cooking energy: gender perspective, Chandrashekar Singh, Integrated Research and Action for Development

Chandrashekar Singh presented findings from a study investigating the gender perspectives of clean cooking policies in Chhattisgarh. In the study area, many women spend close to 8 hours per week collecting wood and more time in firewood processing and meal preparation. LPG access has the potential to drastically reduce time poverty. The study showed that though there is a perception that LPG is more expensive, actually for households purchasing biomass, purchasing LPG would be cheaper. In the study, the main outputs were that household income was an important parameter in the switch to LPG, with higher income households quicker to switch to LPG. It also showed that a higher education level of both men and women increased the likelihood of switching to LPG. However, for schemes such as Ujjwala to increase and meet its targets, there needs to be better infrastructure for LPG delivery.

Session II: Gender and Energy Linkages

Moderator: Govind Kelkar

Govind opened the session by revisiting the themes raised by Professor Swaminathan's opening address. She focused on the feminisation of agriculture and the limitations placed on women's agency through lack of access to rights. For instance, the lack of women's access to land rights makes them unable to access most subsidy schemes and unable to practice agency. Govind called for a



redistribution of women's rights and emphasised the need for women to be represented in policy discussions, without which energy democratisation and energy justice cannot take place.

Access to clean cookstoves for economic sustainability and social wellbeing: Sanjit Kumar Behera, Practical Action

Sanjit Kumar Behera presented some of the projects undertaken by Practical Action at the intersection of gender and energy. Firstly, the AGMU programme, which is a federation of women who produce and sell low cost improved cookstoves to more than 5000 households, developed through development entrepreneurship training and peer to peer selling, the programme, where revenue goes back to producer groups, NGO partners and retailers for a sustainable business model. Secondly, Sanjit presented sustainable micro-hydro systems, which involved women as producers at all stages of implementation, resulting in energy-based enterprises in villages. Similarly, the implementation of wind solar hybrid energy systems promoted women as the main implementors and controllers of the system, with the focus of promoting improved lifestyles and better productivity. In other project, Practical Action have promoted solar supply chains which primarily operate through women entrepreneurs and women groups, linking women in the entire supply chain from manufacture to utilisation of solar.

The gender dimensions of energy access: Arianna Tozzi, Sustainable energy consulting

Arianna Tozzi presented learnings and best practices from mixed method field studies undertaken at several community owned solar micro-systems. The study sought to understand the extent to which women feel empowered by Decentralized Renewable Energy (DRE) systems and what women's empowerment adds to the functionality and sustainability of DRE systems. The study looked to explore empowerment as a process, with psychological, social and political facets. The study found that empowerment correlated with institutional participation, community corrected-ness, household well being and effective governance. There were, however, several barriers which prevent DRE projects from empowering women, these include social norms which make women unwilling to participate in decision making discussions and limited women led initiatives. Arianna highlighted the role of operational stakeholders in seeking active participation of women and including both men and women in system design. Project funders should include gender indicators in monitoring and evaluation of such projects. As such, Arianna concluded by saying the improvement in wellbeing does not necessarily correlate with empowerment and that gender equality will not happen organically and needs pushed from external stakeholders.

Can renewable energy jobs help reduce poverty amongst women in India? Pamli Devi, World Resources Institute

Pamli Devi presented a paper exploring the potential for the renewable energy supply chain to provide jobs for women and reduce poverty, particularly in rural areas of India. Pamli presented the types of jobs created by Renewable Energy(RE) and highlighted the potential for off-grid energy to create locally placed jobs, with a potentially higher capacity to absorb women than those in industrialised towns and cities. However, many of the roles accessible to

women are of low quality, with poor safety standards and without benefits and regular pay. Therefore, the focus should be not just on jobs, but on good jobs which alleviate poverty. Pamli outlined many of the barriers to women accessing good jobs, which include skill training programmes which are not inclusive to the needs of marginalised people, the lack of access to potential employers and social norms which require women to undertake large amounts of work at home, restricting the freedom of women to seek training and employment. She gave recommendations for potential policy adjustments that may overcome these barriers, for instance, providing mobile training courses to include women, linking training programmes more strongly with employers and assessing the entire supply chain for opportunities for gendered programmes. Pamli used Frontier Markets and Barefoot College as models for hiring and training women in the RE supply chain that could be replicated.



Agariya Sisters: creating a symphony of poverty reduction, women's empowerment, clean energy access and climate change - Devesh Shah & Arti Thakkar, Grassroots Trading Network for Women & SEWA



Devesh Shah and Arti Thakkar presented a case study from the Grassroots Trading Network's operations in Gujarat. They emphasised how work within energy and empowerment had to be pro nature, pro poor and pro women. Their work prioritises full employment and self-reliance for women, aiming to reduce financial poverty, time poverty and energy poverty, all of which are closely

interlinked. The case study looked at women working in salt production locally called as *Agariya*, where diesel pumps were used to pump saltwater for in the pan for salt production. These pumps were owned by men and gave women doing the work little control over assets. By giving women access to finance, they were able to purchase solar pumps, facilitating a shift in power relations. The saving in diesel enabled women to earn more per kg of salt they produced. Scaled up in the wider context, Devesh and Arti highlighted the availability of

technology, but lack of capital for poor families to access this technology, as well as the barriers in financials literacy and assets upon which to take credit. As part of the intervention SEWA identifies financial institutions and works to make credit and loans more accessible for women. Devesh ended with a message to the wider GENI community and policy makers, that women are more than willing to take and repay loans, but that loans are needed at an affordable price, with affordable credit.

Session III Energy users' perspectives

Moderator: Manjula M.

This session explored the experiences of women farmers from Kerala and Tamil Nadu, who spoke about their energy experiences, opinions and requirements.

Divya, Wayanad, Kerala

Divya comes from a *Kurichiya* community, they have 22 families in the household who live separately but come together in the large ancestral home to cook together as a community. She does not see the potential for LPG for large scale, because of the number of people there are to cook for, so they use firewood for cooking, with LPG and solar in the individual homes. The women in her community are all part of different SHGs and so take loans from different places. They have 20-30 acres of paddy and farming it is mostly done by women, with men taking little interest. They prepare the land with a hired tractor, but other than that all work is done by hand. The cultivation is mostly rainfed, though there is one electric motor owned by the panchayat, which the Divya's family occasionally use. They continue to use traditional rice varieties. They provide seed to the village seed programme and sell straw for cash income, but the other crops they keep for their own consumption. Income goes to the family committee, which the family head manages, though women in the household have a large say in other family decision making.

Radha, Wayanad, Kerala

Radha comes from the largely landless *Paniya* community in Wayanad. They rent land from others and are engaged in farming. The farming products are mostly for their own subsistence and they do dairy farming for an income. Women are actively involved in the farming and use a lot of hired machinery to cut down on time. For her, the switch to LPG was important, the time saving enabled her to have enough time to take up another job. They refill the LPG every 2-2.5 months, around 1km away. She also says electricity connection gives the children better light to study and having an electric clothes iron means the children can go to school looking smart, which is important to her.

Latha Vijayan, Wayanad, Kerala

Latha spoke about her experiences living and farming in Wayanad. On her farm she grows pepper, coffee and cardamom. They have a wetland paddy area that they have converted to

Areca plantation and they also grow vegetables. They have cattle and have been using biogas for a long time. They do not use complex machinery on their farm, except hiring a tiller for paddy. They used to have solar in their house, but since the grid came they have stopped using. They are, however, very conscious of how much energy they use, fearing high electricity bills.

Murugeswari, Dindigul, Tamil Nadu

Murugeswari said she started using LPG for cooking 10 years ago. Before, they would collect firewood for cooking. There are 10 people in the house, so the cylinder last less than two months. She said she wishes they had not become so used to LPG, because it is hard for them to revert to biomass when LPG goes up in price. She refuted claims that LPG was empowering for women, saying that the fluctuating price with changes in subsidy made it unpredictable. For her, the LPG price needs to go down for it to be taken up by more people. She said it is useful because then they can spend more time with their children. Women in her area have started demanding that LPG cylinders become part of dowry, so they do not have to use biomass in their new homes. All the messages and phone calls are LPG, as part of Ujjwala and the 'give it up' campaign come in Hindi, so there is a language barrier for her, and the programmes are not inclusive for those who do not speak Hindi. With regards to her livelihoods, she thinks there are bigger issues when farming goes bad, than because of issues around energy. She said that in her opinion technology brings in good and bad, unless you know how to use it well.

Shanmugathai, Dindigul, Tamil Nadu

Kalavathi is part of a goat rearing cooperative. They use mobile phones to administer the goat rearing business. Because many of those in her cooperative are illiterate and only speak the local language, they use voice messaging to keep in touch and communicate. In the cooperative they were adamant on what they wanted to prioritise, so they worked to facilitate loan access, so all members could get solar energy, toilets and LPG connections. In Tamil Nadu electricity for agriculture is free, so she says it is difficult for people to be persuaded to take up solar for agricultural purposes, but that the government and solar companies are trying to persuade larger farmers. There is a plan in her village to use CSR funded to set up community scale water purification, which would then be pumped to all the households. If it is successful they plan to scale up to more villages. She said her family decided to get an electricity connection after an instance where a kerosene lamp had been on all night, and the children woke up covered in soot, and so their father got a shock and decided to sell all their paddy to afford the electricity connection.

Lakshmi, Puducherry

When Lakshmi and her family were struggling financially, they started a printing business in their home. She learnt to use a computer and her and her husband developed a small-scale enterprise. They took a free LPG connection, but supplement this with two biogas systems.

She sees lots of advantages in this, there is no waste in the house, they have to use less LPG and biomass fuel and the biogas systems produce high quality manure, which she can now sell for a higher price than regular fertilisers. Many people come to buy the fertiliser from her and her system has gained attention from media agencies. There was a high investment cost, but she thinks if there was a subsidy then many people could replicate the system. She said it is the responsibility of government, civil society and citizen to help the shift to clean energy for the future.

Session IV Gender and Energy Linkages

Moderator: R. Rengalakshmi

She introduced the participants and highlighted the socio, economic and technology related issues in turning access to use in energy based actions.

Bringing ICAR Innovation to the IFAD portfolio projects in India, Jeevan Mohanty, International Fund for Agricultural Development (through skype)

IFAD is working with ICAR in fine-tuning the farm machinery based technologies for higher adoption. Recently 24 technologies focusing on farm mechanization, post harvest and agri waste management were selected for further work and IFAD is working on a standard protocols for energy auditing. ICAR-IFAD joint exercise for technology screening from available 300 technologies have been initiated with 30 institutions located in 22 states are part of the exercise. These technologies will be screened further in two stages and finally it is planned to select at least 30 technologies for implementation in IFAD project states.

GHG emissions, technologies and women's work, Pratap Bhattacharyya, Central Rice Research Institute

Pratap Bhattacharyya's presentation focused on the climate aspects of agriculture and the intersection with gender in agriculture. Pratap presented data on the potential climate risks facing parts of India, particularly the increase in temperature and decrease in rainfall in some areas, and sea level rise and increasing frequency of cyclones, drought and floods in other areas. Rain fed agriculture is particularly vulnerable to climatic shifts. Agriculture contributes to GHG through manure management, residue burning, nitrous oxide in manure and the methane released from the soil in rice farming. Many of the mechanisms both to reduce GHG emissions in agriculture and create resilience in agriculture intersect with the roles traditionally undertaken by women in farming. Alternate mechanisms for transplanting, seeding and transplanting paddy would both decrease GHG emissions and reduce the physical burden on women, therefore interventions on improving agricultural methods should include gender perspectives.

Political economy of electricity access in Tamil Nadu, Vishnu Rao, Citizen Consumer and Civic Action Group

Vishnu Rao's presentation explored the Tamil Nadu electricity sector subsidy narrative from 1989 to 2016. This presentation presented how consumers and community groups have been involved in political subsidy decision making. Vishnu presented many developments in the subsidies in electricity, looking beyond the political narratives to the socio-economic motivations for subsidies and the political economy around electricity. He explored the ways

in which various political movements and consumer groups influenced the policy decision making over this period. Also significant in this presentation is the historic absence of gendered approaches in decision making around electricity policy.

Status of clean cooking energy: influencing factors, Sasmita Patnaik, Council on Energy, Environment and Water

Presenting findings from a wider CEEW survey across 6 marginalised states in India, Sasmita made some key points about the gender dimensions of energy access. The presentation spoke about the gap between policy and ground realities, for instance, the unified guidelines that mandate delivery of LPG at doorstep, when this only happens for 18% of households. She also discussed the lack of alignment of many policies with household cash flow; while government schemes may overall make LPG more affordable than purchasing biomass, it does not allow for smaller, incremental payments towards cooking fuel. The larger, single transaction acts as a barrier for poorer households facing other financial pressure. Speaking about the tendency to compare LPG and biomass, Sasmita raised the point that for most households, education, livelihoods, health, water and electricity come as a higher priority, and that men and women often prioritise needs differently. Sasmita highlighted the tendency to work only on matters around women's empowerment, citing a need to talk to men as well and provide continued support. Finally, Sasmita reminded us that women are not one homogenous group and there is a need to think about the intersections with other social structures and how this affects groups of women differently.

Key takeaways from workshop:

1. Importance of involving energy users in conversations around gender and energy

The workshop invited women farmers to take part in the workshop. They helped to provide grassroots knowledge and lived experiences of the realities of gender and energy in rural Tamil Nadu and Kerala. Just as GENI hopes to advocate for gender inclusion in the energy system, this inclusion should also extend to GENI work.

2. Energy access is important, but is only part of gender empowerment

As well as energy access, there needs to be supported by many other legislative, financial, educational and societal developments to ensure women can utilise and exploit energy access opportunities and to facilitate gender equality and women's empowerment.

3. Women have roles to play throughout the entire energy system and supply chain

Where the focus has often stayed on women having access to electricity, we also need to consider usage of energy, agency and control over energy and role of women within entire energy system and supply chain.

4. Mind the gap between policy and implementation

There is a large gap between policy designed at state and central level and implementation on the ground. Gender inclusive policy is an important step forward, however, this needs to be followed with implementation and sustainability mechanisms that utilise gender inclusive approaches.

5. Consideration for women's priorities aside from energy

Considerations around gender and energy need to have empathy for real life priorities of women and households. Clean energy is important, but women, men and families also must consider water, education, healthcare and livelihoods and so energy needs to be considered within the whole range of needs.

6. Women are a non-homogenous group

The experiences of all women are not universal. When we talk about gender and energy, is a need to consider the intersection of gender with caste, religion, ethnicity and other social structures.

7. Access to finance, skills for women

In order to turn the access to use in energy sector as well as to make an tangible and sustainable benefits among women, adequate attention is needed to create an access to finance to own the necessary infrastructure and use the services. In addition, necessary skills have to build on to use it along with enabling their role in supply side chains as entrepreneurs and promote their participation in energy governance.

8. Increasing the value of women's labour

Availability of free women labour at household restricts the use of energy based farm machinery in the rural areas. The challenge is how to increase the value of women's labour which may trigger the demand for energy based technologies by women.

9. Addressing the gendered norms in energy access

Gendered access and use of electricity is still largely shaped by socio cultural norms – how women's agency and collective actions can support them to overcome it and create an asset in women's name



LIST OF PARTICIPANTS

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