

Presentations at Round Table

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1.	Developing a gender perspective in electricity access and end use	Ann Josey and Sreekumar N, Prayas Energy Group
2.	Research Gaps and Data Needs: Some Thoughts	Narasimha D. Rao, IIASA
3.	Grid-based electrification to increase womens' mobility and access to labour markets	Tejal Kanitkar, TISS
4.	Experiences of advocacy around gender and water	Seema Kulkarni, SOPPECOM
5.	Gender and electricity: some thoughts on end-use, sustainability and technology	Asha Achuthan, TISS
6.	Gender equality in electricity sector operations: international experiences	Soma Dutta, Energia
7.	Gender and Grid Electricity: A Livelihoods Perspective	Sumi Krishna, Feminist Scholar
8.	Influence of Intra-household Dynamics on Gender and Energy Poverty	Shirish Sinha, SDC



Developing a gender perspective in electricity access and end use

Prayas, Energy Group

Round table on Gender and Electricity
26th September 2014

Why Gender?

- Part of Prayas's on-going work on 'Electricity service and the poor', organised in two streams
 - Improving Service quality
 - Democratising Sector governance
- Important lessons from this work
 - Extent of poverty, process of becoming poor and exit routes out of poverty – all are equally important
 - Poor are not a homogenous group and hence important to have specific focus based on causes of marginalisation
 - **Gender is one such important cause**

Scope and Focus

- Scope
 - Gender and not women
 - Largely Grid electricity, but lessons from off-grid
 - Energy services based on electricity, not electrification
 - Access and end use now, supply and distribution later
- Focus
 - Informed participation, not just passive victim mode
 - New roles for men and women, beyond current stereotypes, to improve the sector for all

Electricity for Development

Reliable and
affordable access

Healthy Power Sector

Good service
quality

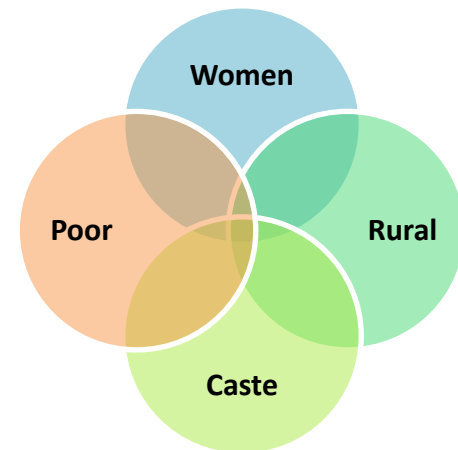
Informed
Participation

Democratising Governance

Representation

Development

Focus on Marginalised



Electricity Sector Overview

Ministries

- Central Ministry of Power, State Energy Ministry ,Ministry of New and Renewable Energy

Legal Framework and Policies

- Electricity Act, Electricity Policy ,Tariff Policy, Rural electrification policy, State level policies

Service Providers

- Distribution Companies, Distribution Franchisees, Distributed Renewable Energy Service Providers

Spaces for democratisation

- Electricity Regulatory Commissions, Village Panchayats, District Committees, Avenues like RTI and RTH

Institutions for service quality accountability

- Grievance Redressal Forums, Ombudsman, State Electricity Inspectorate

Programs

- RGGVY, Energy Efficiency Programs under BEE, Power for All, Off-grid Programs

Action ideas : Framework

- Principles for Framework
 - **Need for informed participation by women from different backgrounds**
 - Representation
 - Building capacity
 - **Change in Governance**
 - Gender sensitive legal framework, policies and service delivery institutions
 - **Change in gender roles**
 - Question current roles played by women in the household and community
 - Work with organizations to influence social institutions
- Action ideas in all 3 major sector areas and supporting research
 - **Policy & Planning**
 - **Operation & End-use**
 - **Regulation**

Action ideas: Suggestions

- **Policy and Planning (Ministry)**
 - Gender sensitive suggestions to amendment of Electricity Act and related policies
 - Broadening scope of district committees, Panchayats, ERCs,
 - Increasing the representation of women in fora
 - Suggestions to increase gender sensitivity in programs like RGGVY, Power for All
 - Changing definition of village electrification to include gender indicators
 - Priority for connection to women headed households
 - Evaluation of schemes to include gender aspects

Action ideas: Suggestions

- **Policy and Planning (Ministry)**
 - Integration of electrification plans with other development programs
 - Some programs are more gender sensitive: important lessons
 - Gender specific efforts can be focussed.
 - Addressing data and information gaps
 - Special, large scale, occasional survey to gather ground data on electricity and development.
 - Focus on newly electrified States, villages, households.
 - Survey to cover supply & service quality, end use patterns, aspirational needs for household and its members, community and productive use.

Action ideas : Suggestions

- **Operation & end-use (Distribution Company)**
 - Simple accessible complaint recording and bill payment facilities
 - Role of community/women's groups in Grievance forums, substation committees, franchisees
 - Study intra-household dynamics in electricity use
 - Pilot projects on theft reduction/Energy Efficiency
- **Regulation (Regulatory Commission)**
 - Representation of women in various fora like Advisory Committee, Consumer representative
 - Proactive efforts to increase participation of community and women groups in public hearings etc.

Action Ideas : Suggestions

- **Knowledge Building (Researchers)**

- Gender based electricity sector analysis to support action ideas
- Customising lessons from other sectors
- Beyond poor focus
 - Study end use patterns, roles etc. of urban, rich women
 - Study electricity service provision from a gender perspective in developed nations- is gender justice there?

Research Gaps and Data Needs: Some Thoughts

Narasimha D Rao

International Institute for Applied Systems Analysis

Round Table on Gender and Electricity

New Delhi, September 26, 2014

Overview

- Preliminary study based on survey of recent literature
- Many research and data gaps to be addressed
 - Are adequate areas of knowledge being used to identify and characterise issues?
 - Are the right questions being asked?
 - Are current data collection methods adequate to answer questions?
- Gender dimension of poverty and slow transition to use of modern energy sources are interlinked- need for further study

Research Gaps

- Intra-household power relations and the uptake of modern energy services
 - Appliance purchase and use - Beyond connection
 - Determinants of Women bargaining power in technology and energy service adoption
 - Influence of bargaining power on impacts /benefits
 - Take lessons from studies in other fields
- Multiple dimensions of modern energy services
 - Need to differentiate between ownership and use
 - Influence of non-energy factors (market, credit etc)
 - Bargaining power study not limited to spouse, but also other members in the house

Research Gaps

- Rigorous, empirical impact studies of modern energy access on women
 - Inconclusive since some show benefits, some don't
 - Potential benefits are often not realised
 - Problems with measuring benefits
 - Complimentary enablers need to be incorporated
 - Barriers (perceptions, bargaining power, social norms) to realization of benefits
 - Challenge: to make general observations while capturing context specific drivers
- Need to study Women-led energy enterprises
 - Energy needs of enterprises where women are engaged
 - Data on energy costs, productive uses, income effects of electricity
 - Lessons from such community based energy supply enterprises
 - Factors (social, contextual) to ensure sustained engagement by women

Methods and Data

- Methods
 - Case studies focusing on energy and women's attributes dominate
 - Need to quantify impact of linkages and account for contextual factors for policy lessons
 - Studies need to understand perceived status and women's preferences – needs longer time on the field
 - Study of failures equally important
- Data
 - NSSO etc. does not capture gender segregated data or nuanced information
 - Some insights from IHDS 2004-5
 - Time spent on cooking fuel collection comparable for bio-mass or non bio-mass HH
 - Time spent on water collection nearly double than that for fuel
 - Decision on what to cook: Female (75%), non spouse (14%)
 - Decision on appliance purchase: Male (73%), non spouse (15%)
 - Need to capture perceptions/preferences, social norms, and enabling environments

Grid-based electrification to increase womens' mobility and access to labour markets

Tejal Kanitkar

Centre for Climate Change and
Sustainability Studies, TISS, Mumbai

Patterns of Energy Use

Land Ownership (Acre)	LPG Use (MJ/Person/Month)	Electricity Use (MJ/Person/Month)	Traditional Fuel Use (MJ/Person/Month)
0-5	22	145	498
5-12	31	205	639
>12	49	317	984
Landless Agriculture Labour	17	17	639
Landless Other Labour	34	22	718

Caste category	LPG Use (MJ/Person/Month)	Electricity Use (MJ/Person/Month)	Traditional Fuel Use (MJ/Person/Month)
General	20	172	677
OBC	6	130	1045
NT*	2	363	504
SC	1	17	631
ST	31	20	553
VJNT	00	52	632
Others	16	50	542

*NT Community in the particular village concerned were the Vanjaris, the dominant land owning caste in the village

Average time spent in fuel collection and preparation by women

Caste Category	Average Time Spent (Hrs/week)	
	Karakatta (Dryland village)	Oney (Irrigated village)
General	2	0
OBC	2	
NT		0
SC	12	1
ST		14
VJNT	15	
Others	8	4

Access to energy

- Primary energy
 - Cooking, heating, **livelihood**
- Secondary energy
 - Cooking, lighting, other domestic use, **livelihood**
- Access has to be understood in a more comprehensive manner – facilitation and augmentation of productive activities

Gender and energy

- Access to modern sources of energy
 - Enabling opportunities outside the household
 - Expanding labour markets in which women can find place
 - Enabling environment within the household
 - Reducing drudgery related to collecting and preparing fuel
 - Reducing drudgery of not being able to use modern appliances – mixers, grinders, refrigerators, washing machines etc.

Access to Labour Markets

- Female labour absorption in agriculture
 - High → 55-66%
 - Weeding, Hand-Sowing, Planting, Harvesting
- Increase in labour absorption with increased irrigation → higher incomes → access and affordability of modern fuels
- **Electrification of pump-sets should be a top priority**
- Non-agricultural enterprises
 - Low labour absorption of women labour in construction, but high absorption in other small scale industry

Migration out of agriculture

- Major driver of access to modern energy → **stable sources of income (not quantum)**
- Availability of stable sources of income necessary condition for access to modern appliances
- Access to modern appliances → facilitating mobility 'outside' the home

Modern appliances

- Necessary to facilitate
 - Access → reliable, affordable
 - Provide incentive structures for the penetration and uptake of modern appliances
- Cannot be achieved by low grade energy solutions in the first instance
- Current situation calls for an expansion of grid based electrification

Experiences of advocacy around gender and water

Seema Kulkarni

SOPPECOM

At the outset

- This talks much more about the micro context and not about inequities in composition of water bureaucracies and creation of knowledge and discourses around water
- All of which is very gendered and hold implications for the way programmes are planned and designed
- Many of the broader points however apply

Women and water: A special relationship

- The journey from understanding women as victims of water crisis to seeing them as solutions to it has been a long one
- Policy prescriptions have thus been seen as beneficiaries of welfare programmes to equal participation in planning around the resource
- However this understanding has been limited to domestic water rather and water for production

Determinants of water access and control

- Caste, class, religion intersects with gender in significant ways determining access, control and decision making over the resource
- It also determines in significant ways how resource use paradigms are constructed- for example how equitable, sustainable, democratic
- Whose knowledge is considered as important

Why gender is important

- Firstly significant involvement of women in water related activities which are directly linked to attaining livelihood (domestic water, agriculture, other livelihood activities)
- A material relationship with water brings in an experiential understanding of the resource and would contribute to bringing in a different world view around water and its sustainable use

Assumptions that have guided policy makers

- Women are a coherent group with similar interests across caste, class, religion
- Women's work and their roles are static for example they will continue to be responsible for collecting water, cooking, cleaning and nurturing or labouring in agriculture
- Households are co-operative units headed by men

How has it translated into policy and programmes

- that women's participation is sought in domestic water and sanitation and not water for production
- reducing drudgery and burden associated with collection of water has been a priority
- most benefits have been in the name of the head of the households-often men from privileged social groups- a well for example

Complex concerns need complex solutions

Our advocacy has been at 2 levels

- Representation in committees at different levels as an immediate first step to bring in views of different sections of women (WUAs, VWSCs)
- Changing the discourse around women and water-reimagining both in order to create ground for sustainable use of resource, equitable distribution and democratic participation

- Representation is comparatively a simpler solution as 'giving' abdicates the state's responsibility to do anything 'beyond'
- Struggles of the private domain or what are referred to as socio-cultural issues no longer remain the State's responsibility
- The second however is far more complex and requires concerted advocacy within the sector and outside of it

Hurdles

- Unlike other marginalised groups the site of conflict is the private domain- relations between men and women (third gender complicates the issue even further)
- Patriarchal mindsets and the social relations produced in the private sphere are not contained in the private sphere but get extended to the public domain
- This makes simple prescriptions impossible

What do we do then?

- Do we abandon the issue until we have resolved patriarchy?
- We need to see all efforts of advocacy as a process towards addressing patriarchy and other forms of social discrimination
- We need to hold policy makers and specifically the State accountable to these grave forms of discrimination which have historically excluded women and other socially discriminated groups from resource access, planning and decision making

Representation necessary but not sufficient

- As a first step representation is important (*see positive stories in note*) but along with representation we also make the state commit to a programme/budget which opens up a space for these representatives to articulate their concerns, bring their knowledge to the forefront rather than simply comply with the existing paradigm

Re-imagining women

- as potentially in different roles (as managers of collective farms for example)
- no longer in subordinated positions and able to express their agency
- Thinking of use of water in a rather different way than as a commodity
- However thinking between men and women will not be different if there are no alternate articulations and possibilities of sustainable use of water

Reimagining water

- Technocentricity and malecentricity needs to be questioned
- A new discourse around water as an ecosystem resource, a social good and a productive resource for attainment of livelihoods primarily and its own sustenance needs to get to the foreground if relations around it have to change- Both are mutually shaping each other

***Gender and electricity: some thoughts on end-use,
sustainability and technology***

Asha Achuthan

Centre for Women's Studies

TISS

Some contexts

- *1: language and terminology*
- effects of gender
- gender rather than women
- households, families

2: gender and science-technology

- Science-technology, or technoscience
- Science as a 'reasonable', 'objective' and 'exact' activity
- Masculinism, gender inequities, and sexism of science
 - *Therefore, the questions relate not only to access and distribution but also to knowledge of energy generation ...*

2: gender and science-technology contd.

Dualism and stereotyping – women, vulnerable communities,
intersections

Questions ...

Which women – among households, within households

Households and families

Gender locations and intersections

Gender and space – electrification [of households] and empowerment
[of women within]

Gender and space – convergence of policies

different knowledge models of energy generation ↔ stereotypes

Gender equality in electricity sector operations: international experiences

Soma Dutta, ENERGIA: The
International Network on Gender and
Sustainable Energy

Rural electrification pilot in Lao PDR Power to the Poor Project, World Bank



Case Study – Enabling Environment: Power to the Poor (P2P) in Laos



- Social impact survey: Pick-up rate in electrified villages only 70%
- Poor households that remained unconnected disproportionately headed by women.
- While female-headed households comprised 8 percent of all households, they accounted for 43 percent of poor households.

Strategies and results

- Connection cost barrier addressed by a targeted subsidy mechanism: *all female-headed and single parent households automatically eligible for support, as long as the house is safe to electrify*
- Revolving fund to subsidize household connection costs for the poorest and women headed households
- Gender sensitive communication materials and making the consultative process gender inclusive
- **Increase in electricity access went from 63% to 90% of female-headed households**
- **Scaled up: electrification rate increased to 78% to 95%**
- **~20,000 disadvantaged households connected to the grid...**

Gender responsive promotional material

ການອະທິບາຍໂຄງການ

1 ມີຜູກຄ້າກຽດຮັບຄວາມຕ້ອງການ ທີ່ແຕກຕ່າງກັນ, ແລະຮ່າງແຜນການ, ແລະກຳລັງເຮັດງານ ແລະ ແນວໃດແລະການ

2 ຈຶ່ງຮຽນສະໜັບສະໜູນ ແລະ ຄຸນນະກຳຂອງການຮ່ວມໃຈໃນໂຄງການ ແລະຄວາມຕ້ອງການທີ່ກ່ຽວຂ້ອງ

3 ຈຸດສະໜອງໂຄງ ແນວໃດແລະການ ໃນເລື່ອນຄວາມຕ້ອງການທີ່ກ່ຽວຂ້ອງ

4 ດຳເນີນໂຄງ ກຳລັງເຮັດງານ ທີ່ແຕກຕ່າງກັນ

5 ການຈຳລອງກຳລັງເຮັດງານ ແລະອັດຕາໂປຣແກຼມ

ແມ່ນ ຈຸດສະໜອງໂຄງ ທີ່ເຮັດງານ ຈຳນວນ 700.000 ຕື້

ການບົດບະລິດສາທະລີດໂປຣແກຼມ ຊຶ່ງມີຄ່າທຳນຽມ, ໂຄງສ້າງ ແລະການຮ່ວມໃຈ 700.000 ຕື້ ກຳລັງເຮັດງານ ທີ່ແຕກຕ່າງກັນ ຕາມເລື່ອນຄວາມຕ້ອງການທີ່ກ່ຽວຂ້ອງ

Gender mainstreaming at Kenya Power



Source: Presentation by Anne Owuor, Kenya Power.

**At Bridging the Gender Gap for Development Effectiveness in
the Energy Sector, A Policy and Practitioners Meet
12-13 December, 2011, Amsterdam, The Netherlands**

Kenya Power , the Organization

- Population Electricity Access 29%
- Limited liability Company
- Majority Government Shareholding
- Mandate: Transmit, Distribute and retail electricity to customers throughout Kenya
- Key statistics:
 - > 1.8 million customers
 - >8,500 full time employees, 80% male & 20% female- full time employees.
 - 3546 Day casuals, 90% male & 10% female

Strategies to increase connection rates

- Group schemes
- Reviewed connection charges to flat fees when near a transformer of : single phase Ksh 32000/=and 3phase of Ksh 45000/=
- Easy Payment strategies
 - Payments by instalments
 - Revolving fund, pre-payment
 - Enhance customer service by partnering with service providers: Barclays Bank, Post Office, Mobile- Airtel, supermarkets
 - e-Bills (you query bills through e mail/ sms alerts)
- De-centralisation of services- 62 branches
- Free distribution of 1.25 million bulbs to electricity customers

Institutional measures for Gender integration

- Organisation's 5-year Strategic Plan incorporate gender **targets & timeframes**
- Built **management understanding** on what gender issues need addressing: a Gender Committee 4 men and 4 women (middle management), Gender Coordinator (high level)
- Recruitment –at least 30% women
- Increase in intake of women at the Training School
- Gender issues at workplace: Kenya Power's Policy against Sexual Harassment & Discrimination and Equal Opportunity Policies gained **Top Management approval** in Jan 2011& Board Approval in May 2011
- **Awareness:** Ongoing Training in various Regions to inform on the Organization's gender strategies
- 2 weeks paternity leave
- **GMS Monitoring & Evaluation Framework** used to evaluate progress

Other Examples of gender sensitive practices in electrification programmes

- Electricity user committees extending loans to women to establish energy based enterprises (ADB, Nepal)
- Connections & bills put in women's names (SEWA – India, provides legal identity and adds value to house)
- Consulting women about where lights and plug points/ready board should be placed
- Combine provision of cooking fuels & stoves with supply of electricity (Eskom, South Africa; Botswana)
- Attention to recruiting & training women employees (Coelba & Light in Brazil, S. Africa, Kenya)
- Reserved seats for women on rural electricity cooperative boards (Bangladesh)

Areas for further exploration

- Energy **solutions** to ease women's work burden and improve access to health services and education
 - Water pumping
 - Labour saving appliances
 - Electricity for community health
- Women playing a role in last mile functions in electrification: awareness on conservation, meter reading
- Combine other services with electricity provision (kitchen appliances, water boilers
- Focus on women for awareness on use of electrical appliances

GENDER and GRID ELECTRICITY: A Livelihoods Perspective

Sumi Krishna

1. Women's Domestic / Productive Work
2. Professional/ Technical Women Workers
3. Livelihood Impact of Grid Electricity
 - a) security; b) information
 - c) value addition; d) diversification
4. Livelihood Issues: Moving Forward
 - a) research b) policy

1. Women's Domestic/ Productive Work

- ❑ The development debate on women and energy is four decades old.
- ❑ The initial focus was on women's domestic work and renewable energy.
- ❑ Women's productive, livelihood work was neglected.
- ❑ The approach was based on the conventional sexual division of labour: 'involving women, ignoring gender'.

2. Professional/ Technical Workers



❑ Changing ratio of professional women in electrical/ electronic engineering

❑ Little data on women in related technical trades

❑ Institutional/ social barriers to participation



3.Livelihood Impact of Grid Electricity

- a) **Security:** Critical for women's work participation:
Alters gendered public space
- b) **Information:** Awareness of opportunities and rights
- c) **Value addition:** Facilitating more productive use of
women's time and labour
- d) **Diversification:** Linked to technologies and new ways
of organising production

4a. Livelihood Issues: Research

We need to know broadly:

- Who does what?
- How does gender shape production and consumption of electricity?
- How does the technology impact gender roles and relations?

We need to draw upon:

- Feminist studies on the social shaping of technology;
- Gendered studies of the impact of industrial restructuring since the 1990s.

4b. Livelihood Issues: Policy

- **Gender lens in policy** decisions at each stage: Generation-Transmission-Distribution-Consumption
- **Gender sensitive rehabilitation** for displaced persons (collective land titles to women's groups)
- **Interventions specific to women**, women-headed households for electricity connections, rates, financing energy-efficient equipment etc.
- **Support for off-grid power** –e.g. watermills in hills
- **Support for women electricity professionals**, engineers, technicians, 'barefoot' women professionals

Influence of Intra-household Dynamics on Gender and Energy Poverty

Shirish Sinha
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Swiss Agency for Development and Cooperation (SDC)



Background

- Emanates from research related to access to modern energy carriers (electricity, LPG) by low-capacity end-users (underserved and unserved) in context of policy reforms
- Focused around energy poverty and its different conceptualisation in context of energy access at household level
- Understand different drivers influencing energy access and transition to modern energy carriers
- Some observation related gender-energy access linkages at household level and of intra-household dynamics

Context

- Clarification on
 - Gender – energy vis-à-vis gender – electricity
 - Gender- electricity vis-à-vis women and electricity access
- Links with policy for rural electrification

Reflections

- Availability has improved to some extent, however, access to modern energy carriers remains limited
 - Constant 'backward' and 'forward' shifts between modern and traditional energy carriers; for cooking and lighting
- Energy supply side does not take into consideration 'gender', even in off-grid; access to electricity is driven by its availability
- Evidence related to influence of gendered roles regarding purchasing or shift to modern energy carriers
 - Participation of women in income-earning activities
 - Changes in lifestyle influencing demand

Reflections

- Although it is argued that economic empowerment can result in influencing decision-making related to choice/adoption of energy services, the reality is quite opposite. It happens in few instances
- At household level, reliable and steady source of income a key driver;
 - However, additional income from women's income-generating activity not a prerequisite to switch to modern energy carriers
 - In some households, influenced decisions related to purchase of multiple modern energy carriers to ensure continuity of energy service for different end-use and adding appliances
- In low income households, considerable blurring of gender roles and low and variable income insufficient to switch to modern energy carriers
 - Increasing trend related to purchasing of biomass for cooking

Some more reflections

- In Gosaba, when solar PV electrification started, based on consultation with households, the plan was to have a light in kitchen, post implementation none of the kitchens had a light
- In Bastar, the private LPG dealer incentivised connection by providing utensils
- In Odisha as part of rural franchisee, women were trained and appointed for meter reading, bill distribution and revenue collection, it did not work in practice. However, in Karnataka and Uttarakhand there are examples of women working as franchisee/technical service provider
- SDC's project in Odisha to provide electricity to women-led enterprise and households – what will be the impact needs to be studied

In Pursuit of a Light Bulb and a Smokeless Kitchen



Longitudinal Analysis of Role of Energy
Sector Policies to Alleviate Rural Energy
Poverty in India

Shirish Sinha

UNIVERSITY OF TWENTE.



Thank You for your kind attention

<http://doc.utwente.nl/83256/>