

Gender audit of India national energy policy

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"We congratulate the IRADe-ENERGIA team and thank them for these recommendations. I hope they will be further discussed at MNRE and will be implemented in the near future in line with the Government policy for inclusive growth that has to reach out to a large number of women, especially from the economically weaker sections."

Mr V. Subramaniam, Secretary, Ministry of New and Renewable Energy, New Delhi, 2 June 2008.

Introduction

India is witnessing an increasing demand for energy in its rapidly expanding economy and is making large investments in exploration, fuel production, generation, transmission and distribution of power and in setting up a grid infrastructure. However, gender-based empowerment, the needs of women and their access to and control over energy resources are seldom considered in India's energy development planning. The 11th Five Year Plan (2007-2012) foresees an investment close to US\$100 billion in the energy sector, involving coal, oil, nuclear, hydropower and other renewable energy technologies. However, less than 2% of this national investment is targeted at management and conversion technologies for traditional biomass energy. This is unfortunate given that traditional biomass energy, which is almost entirely used and managed by women and children, constitutes 28% of energy consumption at the national level.

This lack of attention to gender concerns in India's national energy policies may in part be due to the lack of knowledge about the gender dimension in the energy sector and perhaps be due to uncertainties about how to incorporate gender in a sector that has primarily been technically driven. It was against this backdrop that IRADe, ENERGIA's national focal point for the Indian gender and energy network, undertook a gender audit of national energy policies, using the programmes of the Ministry of New and Renewable Energy (MNRE) as the focus of the study. In keeping with the wishes of the Ministry's Secretary, not to have a gender audit that focused 'on the past and was judgemental', IRADe used the audit as a forward-looking tool to propose a road map on how to make the MNRE's policies and programmes more gender-responsive in terms of content and process. The specific objectives of the gender audit were to:

- Identify and assess gender gaps in energy policies and programmes – the mismatch between commitments and implementation.
- Work with stakeholders to formulate strategies and actions that could address these gaps at the national level.
- Make gender and energy issues visible to wide audiences in ways that support national and international networking and advocacy initiatives aiming to influence energy policies and programmes.



A woman in Gujarat, India is preparing slurry for her biogas digester. Biogas, in some areas of India, is a good alternative to biomass for meeting a household's cooking energy needs. (Photo: IRADe)

A key output of the gender audit was the endorsement of the report 'Gender Audit of National Energy Policy in India: Present Status, Issues, Approaches and New Initiatives for Renewable Energy' by the MNRE. The report is primarily addressed to policymakers and those concerned with gender and energy issues in India.

Approach and methodology

Unlike a standard gender audit of an organisation, the gender audit of the MNRE focused its analysis on the impacts that the Ministry's policy and strategies have on gender relations, and in particular MNRE's capacity to provide an enabling environment to support the delivery of energy services that meet the practical and strategic needs of women. At the **macroeconomic level**, the analysis focused on national level investment in management and technology, while at the **meso-level** it focused on MNRE programmes, and at the **micro-level** on the benefits accrued to end-users.

IRADe made a deliberate choice to focus the gender audits on those of MNRE's policies and programmes that relate to household energy for the following reasons:

- 625 million people in India do not have access to modern cooking fuels (Parikh, J, 2007);
- Nearly 300 million people do not have access to electricity; and
- Of the energy used in poor Indian households, 70% comes from non-commercial fuels such as fuelwood, agricultural wastes and animal dung that are primarily managed by women.

In this context, the key government document that provided the overall framework for the study was the '**Integrated Energy Policy Report of the Expert Committee**' (IEP) prepared by the Government's Planning Commission. This explicitly acknowledges and includes a gender approach and, in this respect, is the first of its kind in the energy sector in India. Further, some of the programmes and schemes of the MNRE, including the National Programme on Biogas Development, National Programme on Improved Stoves, Village Energy Security Project (VESP) and solar energy programmes, were reviewed.

A multi-pronged methodology was used for the collection and analysis of data and information. This involved literature reviews; a background study of gender, energy and poverty issues; the use of checklists, structured interviews, case studies and focus group discussions with officials from relevant ministries. A technical adviser, Dr Govind Kelkar of UNIFEM, and a Think Tank Group, comprising experts in the field, provided strategic guidance, advice and feedback throughout the audit. The report was peer reviewed and the gender audit analysis was synthesised into key findings and recommendations for policy actions.

Although the methodology built on the approach used for the ENERGIA gender audits in Africa, it was unique in the sense that it included a 'gender rating system' designed by IRADe to rank the effectiveness of MNRE's various programmes in delivering benefits to women, relative to the budget outlay in MNRE's 10th Five Year Plan. This enabled the programmes to be categorised as Not Relevant (N); Partially Relevant (P); Mostly Relevant (M) and Specifically Relevant (S), which were assigned weights of 0, 0.2, 0.4 and 1 respectively. Thus, for example, a biogas plant would be assigned a weight of 1 because of its specific relevance to women's cooking energy needs. Although this analysis does have its limitations and needs further development, it provides a quantifiable indicator that identifies how

gender-responsive a programme is, something that resonated with policymakers.

Key findings and recommendations from the gender audit

Reorienting monitoring and evaluation protocols to reflect gender concerns in energy programmes:

Findings and identified gaps

- Non-commercial energy, in the form of traditional biomass that is collected and used by women primarily for cooking, accounts for 28% of India's primary energy consumption, compared to the 2% from modern renewable energy technologies (wind, solar PV, solar thermal, ethanol, bio-diesel, biogas, etc.). The reliance on traditional biomass is likely to continue into the foreseeable future. Unfortunately, the level of national investments in the management and conversion technology of traditional biomass is limited and no ministry has a mandate to ensure its sustainable supply.
- Important barriers to women's participation in renewable energy projects are their lack of access to financial resources, their lack of ownership of productive resources such as land, inadequate technical education and training, and unequal power relations in the household.
- None of the existing programmes collect gender-disaggregated data, and this makes it difficult to assess the impacts and benefits of any policies and schemes on women's wellbeing.

Recommended actions

- In order to strengthen the accountability of various ministries, in terms of their performance on gender and energy, monitoring and evaluation (M&E), using strategic gender indicators should be made a regular and compulsory part of ministerial programme cycles. The use of gender-disaggregated data in the M&E of policy and programmes will highlight the gendered distribution of benefits and identify inequalities between men and women.
- Equally important is the identification and clear articulation of gender goals in the preparation of energy programmes using explicit and measurable variables and indicators.
- Gender budgeting should be made an easily accessible tool to be used by ministries to assess how each ministry uses its financial resources to address women's practical and strategic energy needs, which includes women's ownership of energy infrastructure and their participation in management.

Linking women's empowerment with energy development

Findings and identified gaps

- An analysis of the budget outlay of the MNRE's 10th Five Year Plan calculated that only 12.67% of the ministry's budget addressed women's specific energy needs. This percentage will vary depending on the perceptions of the person who conducts the ranking and the weights they choose, but it is unlikely to exceed 20%. It should be noted that these figures are only indicative given the limitations of the study in terms of funds, time and scope.

Table 1: MNRE's 10th five-year plan: budget allocation for women

Category	Allocation (Pro-women Component) (\$ Million)	Not relevant to women (\$ Million)	Percentage of total ministry budget	
			Relevant	Not relevant
Specifically relevant for women (S)	104.5	0	5.86	0
Mostly relevant (M)	117	174	6.45	9.67
Partially relevant for women (P)	7.5	30	0.42	1.67
Not relevant to women (N)	0	1362	0	75.71
Total outlay to Ministries	228	1566	12.67	87.05



Women at an improved stoves dissemination meeting in Gujarat, India. One of the findings of the gender audit of national energy policies in India was that only a small part of the Ministry's budget actually addresses women's energy needs. (Photo: IRADe)

- The energy programmes for women have failed to recognise the potential contribution that energy services could make to women's empowerment within a socioeconomic context, and been limited to meeting their immediate needs for cooking and lighting. For example, the mandate of the National Programme on Improved Stoves was limited to constructing improved stoves, and there was no focus on cookstoves as a potential instrument for improving the status of women.

Recommended actions

- Set up a mechanism within MNRE to ensure that the budget earmarked to address women-specific needs is utilised while simultaneously instituting a clear mandate for more programmes to incorporate gender-responsive goals and activities.
- Incorporate the experiences of NGOs and other private sector organisations in MNRE programmes and planning processes. Given that the MNRE has only two women employees at the level of energy officer, it is also important for the ministry to address the gender imbalance in its staffing and employ more women officers.
- Publish an annual report that shows the benefits of energy systems in improving women's social status, increasing their employment and their decision-making within communities and households, and the percentage of energy assets managed and owned by women. This report could be used as an awareness-raising tool for policymakers.

Inter-ministerial coordination

Findings and identified gaps

Non-commercial energy is not solely the responsibility of MNRE, as fuelwood and agriculture products are also the concerns of other ministries such as the Ministry of Environment and Forests, the Ministry of Rural Development and the Ministry of Agriculture. Similarly, electricity, kerosene and LPG, that also contribute to household energy, are within the remit of various energy ministries, i.e. the Ministry of Power and the Ministry of Petroleum and Natural Gas. A stakeholder meeting, organised by the India Planning Commission, acknowledged that the lack of coordination and an effective inter-ministerial set-up, involving the various energy ministries and other ministries, has led to poor supply networks and inefficient delivery mechanisms which have had disproportionate impacts on women's wellbeing and economic development.

Recommended actions

- Develop a working relationship between ministries, in conjunction with regular consultative meetings with MNRE, with the priority of developing gender-responsive programmes.
- Give a mandate to MNRE's Gender Budgeting Cell (GBC) to collaborate and advise GBCs in other ministries on how to integrate energy in their gender budget programmes.
- Develop training and capacity building programmes within each ministry on understanding and using gender budgets.

Making cooking fuel available within one kilometre of rural habitations

Findings and identified gaps

Biomass fuels are likely to remain the primary fuels for process heat and cooking for years to come as commercial energy options are, even when subsidised, still expensive and inaccessible for India's rural poor. This scenario increases the importance of the target, endorsed by the IEP and subsequently included in the 11th Five Year Plan, for there to be "access to fuelwood plantations within one kilometre of all habitations". Such a target is equally important for other clean and affordable forms of cooking energy in order to reduce women's drudgery, the time they lose in gathering fuel and the health impacts of indoor air pollution.

Recommended actions

- Strengthen the goal of establishing fuelwood plantations within one kilometre of all habitations to include access to other fuels such as LPG, kerosene and biogas.
- Establish a mechanism through which the various ministries can cooperate in operationalising this goal depending on the state, the district, the ecosystem and the economic status of the target group.
- Provide finance and capacity building support to women's groups in organising fuelwood plantations as a component of projects implemented at the village level. Crucially, self-help groups, Panchayati Raj institutions and community-based organisations can be efficient institutions to manage such initiatives at the local level. Such organisations, with their wide constituencies, could encourage farmers, and women farmers in particular, to actively participate in energy management and village decision-making processes. Their participation in energy policies and programmes would reduce the transaction costs of inputs and outputs to energy enterprises (such as wood lots, biogas, solar energy, LPG) at the local level, and the gaps between policy commitments and implementation. ■

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◆ India Gender Audit Team

- Dr Jyoti Parikh, Executive Director of IRADe and team leader for the gender audit. Dr Parikh was responsible for liaising with the Planning Commission, MNRE and the Think Tank Group.
- Dr K. Sangeeta, consultant with IRADe with a doctoral degree in Environmental Science from Pune University, India, is a senior gender and energy researcher and contributed substantially to the compilation of the gender audit report.
- Mr Chandrashekhar, Research Analyst with IRADe with a Masters in Economics from Pune University, India, was responsible for the economic and statistical analyses in the gender audit.
- Ms Aysecan Oztop, a Researcher at IRADe who obtained her degree from Bogacizi University, Istanbul, Turkey, conducted the extensive desk reviews of the government's policy documents, programmes, and gender and energy papers.

◆ IRADe is an advanced research institute which aims to carry out research and policy analysis, train people and be a network hub linked to many stakeholders. Its main focal areas are environment and climate change; energy and power systems; impact of policy reforms; poverty alleviation and gender; action projects with communities; training and capacity building; and policy advocacy and dissemination.

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