

Enabling Equitable Access to Rural Electrification: Current Thinking on Energy, Poverty, and Gender

Elizabeth Cecelski

Poverty reduction and gender equality are now integral goals for all major development institutions.

Energy assistance programmes are seeking models and approaches to respond to these mandates.

Gender and poverty challenges, in widening access to electricity in rural areas, are arising in the context of renewed interest in rural electrification, especially from renewable sources, both as a tool both for sustainable energy development and to achieve greater equity in rural areas.

This article, based on a briefing paper for EnPoGen¹, reviews current thinking on energy, poverty, and gender - with a focus on rural electrification and renewable energy - and as an initial attempt to conceptualise linkages and needs in this area. A companion report² inventories major organisations and activities in this field, and is reviewed on page 22 of this issue of **ENERGIA News**.

Energy, Poverty, and Gender

Sustainable Energy Development (SED) has been defined as sustainability in financial, social, and environmental terms. Energy has been pushed higher up the sustainable development agenda by recent UN meetings, and is being linked to the Millennium Development Goals adopted by the UN General Assembly. Renewable energy and energy efficiency are usually characterised as “win-win” options in SED, meeting the objectives of both environmental improvement and poverty alleviation, (with affordability being the principal challenge). However, despite many efforts, rural energy poverty is still widespread. Consequently, current approaches emphasise an explicit poverty focus, decentralisation and participation, and the integration of energy efforts with other development sectors. Gender issues, however, are still not prominent. Further, recent thinking emphasises that *choice* in energy options is still critical to meeting the needs of poor people, and that a variety of strategies and trade-offs, including efficiency and fossil fuels, will be necessary. Recent thinking emphasises that *choice* in energy options is critical to meeting the needs of poor people, and that a variety of strategies and trade-offs, including efficiency and fossil fuels, will be necessary. Despite many efforts, rural energy poverty is still widespread. New approaches emphasise an explicit poverty focus, decentralisation and participation, and the integration of energy efforts with other development sectors. Energy has been pushed higher up the

sustainable development agenda by recent UN meetings, and is being linked to the Millennium Development Goals adopted by the UN General Assembly.

Over the last two decades, gender issues have attained increasing prominence in the debate on sustainable energy development. International organisations, such as **ENERGIA**, the United Nations Development Program (UNDP)/Energy and Atmosphere Program (EAP), the joint UNDP/World Bank Energy Sector Management Program (ESMAP), the US National Renewable Energy Laboratory (NREL), and Winrock International, have helped to bring the critical issues of gender equality and efficiency to the table (see companion report). Policy researchers and development practitioners have begun building a body of evidence and experiences that links attention to gender in energy policy and projects to equitable, efficient, and sustainable outcomes in development. A number of energy programmes are starting to pay closer attention to gender and are launching important initiatives.

Despite these developments, the importance of bringing a gender perspective to energy policy analysis and design is still not widely understood, nor have the lessons for development been fully integrated by donors or national policymakers. While many are sympathetic, gender is still commonly viewed predominantly as a political agenda and, given this, is not seen as central to questions of energy efficiency or project effectiveness. There is, however, a growing amount of literature on energy and gender concerns, and this is appearing increasingly in mainstream energy publications, though often as a separate topic not integrated with strategies and solutions. The focus in the literature is mainly on poor rural women, on wood energy, and on micro household and project level analysis. Project experience is also becoming available, though much is not yet documented.

This lack of acceptance exists despite the growing literature on energy and gender. Gender is also appearing increasingly in mainstream energy publications, though often as a separate topic rather than integrated with strategies and solutions³. The focus in the literature is mainly on poor rural women, on wood energy, and on micro household and project level analysis. Project experience is also becoming available, though much is yet to be documented. Some especially relevant initiatives and reports are described in the companion report to this paper (see footnote 2).

Current efforts on gender and energy focus on:

- building up a body of evidence and experience (conceptual, methodological, and case studies) linking attention to gender in energy policy and projects to equitable, efficient, and sustainable outcomes in energy and development;
- advocacy in national and international arenas on the importance of bringing a gender perspective to policy analysis and design;
- capacity building, advice, and assistance to energy programmes, policy, and projects in integrating a gender perspective; and
- creating networks and institutions at the national, regional, and international levels to support these efforts both practically and politically.

Current Thinking on Poverty: Some Energy Implications

Current New thinking on poverty broadens the definition of poverty to include empowerment, security, and opportunity⁴. Important aspects include (a) learning from the poor, in order to shape understanding and strategies; and (b) recognising the importance of inter-sectoral policy instrument interactions. However, little or no mention is made of rural energy poverty in current thinking on poverty -with the exception of occasional references to the strengthening of infrastructure and public services to the poor. In the energy sector, inter-sectoral linkages are well-recognised as critical in ensuring the expected impacts of, for example, rural electrification interventions.

Unfortunately, the perspectives of empowerment, security, and opportunity have not been part of the normal professional and bureaucratic concerns of many of those involved in energy policy and practice. Linkages of energy strategies with this framework have been little explored. Energy is not widely recognised as a "basic need" in development circles; working relationships between macroeconomists and engineers, and other social scientists, have been slow to develop in the energy sector (in contrast to other sectors such as health and agriculture).

Different "ways of thinking" are partly responsible for this lack of communication: poverty and gender thinking prioritises people, while energy thinking often prioritises other objectives such as efficiency and the environment. The few attempts to view energy primarily through a poverty optic are quite startling in their challenge to us to alter our perspective.

Rural Electrification, Rural Development, and Poverty

There is no doubt that rural electrification usually benefits the non-poor more than the poor. In fact, like many new technologies, it can increase inequities in rural areas. Nonetheless, there are clearly approaches through which access can be widened and the poor more likely benefit. Two important issues for future research that emerge from current thinking on rural electrification (and indeed energy generally) and the poor are:

- What is the relationship between specific energy strategies and *poverty reduction* (as opposed to merely *widening access*)? Although anecdotal evidence is available, there are very few empirical studies that convincingly demonstrate such a linkage, whereas there are in other sectors (such as health, water, and education).⁵
- What is the effect on the poor of privatisation and market reform in the power sector? Experience in this area is relatively new but it has received some attention recently.⁶



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Some promising directions for analysis and application are:

- appropriate tariff and connection policies, including credit and leasing for decentralised systems;
- the role of subsidies, and the impacts of restructuring the power sector on subsidies and access;
- demand analysis including the use of gender-disaggregated data;
- financial/institutional mechanisms including microcredit, Rural Energy Supply Companies (RESOCOs), community/NGO-based approaches, and private participation in small-scale infrastructure provision;
- productive uses of electricity -especially uses that may only be possible with decentralised systems; and
- institutional coordination of complementary infrastructure.

Some Key Gender Issues in Rural Electrification Programmes

Unfortunately, many past studies of the social impacts of energy interventions have failed to address gender issues, or have addressed them only superficially. It is probable that gender will not be included as a variable for analysis without a specific mandate.

Four key energy issues for poor rural women that require the attention of rural electrification programmes are:

- *data needs and analysis* -disaggregation of energy use, supply, and impacts by gender, in order to provide a better basis for applying established field methods, and analytic tools for incorporating gender in project design and implementation, as well as at the micro- and macro-policy levels;
- *wood energy, cooking, and health* -seeking integrated approaches and a range of solutions (including fossil fuels and perhaps electric cooking) that recognise the central importance of wood energy and cooking for poor women, and their health implications;
- *women's specific electricity needs* in terms of water pumping, agricultural processing, security, work productivity, and health - addressing these in the framework of sectoral development initiatives; and
- *equal access to credit, extension, and training* to assure energy and electricity supplies for women's domestic tasks as well as their microenterprise activities.

Needs

The findings above indicate the following needs:

- to routinely disaggregate energy use, supply, and impacts by gender -at all stages of the rural electrification project cycle;
- to document existing experiences in order to provide (a) empirical evidence of strong linkages between energy, poverty reduction, and gender; and (b) examples of "best practices", models, and approaches;
- to encourage a dialogue and interaction between "ways of thinking" in energy, poverty, and gender, as well as to create capacity to work in this interdisciplinary area;
- to develop new approaches to integrating energy (including decentralised supply options) with other development sectors.

Given the recent burst of interest and activities in this area, and the limited existing capacities available (experts and organisations, especially in the South), any initiatives would be well-advised to focus on capacity-building, to interact closely with other programmes, and to establish partnerships with the various organisations now working on or interested in energy, poverty reduction, and gender equality. ■

¹ The Energy, Poverty and Gender initiative (EnPoGen) of the World Bank Asia Alternative Energy Program (ASTAE), a Dutch-financed project.

² *Major Activities and Actors in Energy, Poverty and Gender* by Anja Panjwani and Elizabeth Cecelski, Report to ASTAE EnPoGen project, July 2000.

³ See, for example, World Energy Council/Food and Agriculture Organization of the United Nations, *The*

Resources:

Major Activities and Actors in Energy, Poverty and Gender

Authors: Anja Panjwani and Elizabeth Cecelski
Published by: The World Bank/ASTAE

An overview of the major institutional actors and their activities in energy, poverty and gender is given in the recently published report "*Major Activities and Actors in Energy, Poverty and Gender*" by Anja Panjwani and Elizabeth Cecelski.

The report was prepared for the Energy, Poverty and Gender initiative (EnPoGen), under the auspices of the World Bank/Asia Alternative Energy Program (ASTAE), to which this issue of **ENERGIA News** is dedicated. Although not encompassing all the initiatives in this field, the report sets out to include all the major ones and is the only overview of its kind. It could be used as an important resource document in the energy, poverty, and gender field, not only for further study in this area, but also for the various stakeholders involved at the decision-making, policy-making, or implementation levels. The report contains contact details and weblinks to facilitate direct communication with initiatives of interest to a reader.

The report was first published in January 2000 as an Annex to Elizabeth Cecelski's briefing paper "*Enabling Equitable Access to Rural Electrification: Current thinking on energy, poverty and gender*", which was prepared for ASTAE (see also her article in this issue of **ENERGIA News**). However, given the recent burst of activities in the field of energy, poverty, and gender, and given the fact that the EnPoGen project is to end in December 2002, it was deemed prudent to revise and update the information in the Annex. Given the amount of material this update generated, the Annex has been upgraded to a fully-fledged companion report to the paper.

The updating and revising was a joint collaboration between EnPoGen and **ENERGIA**. Some of the information on the activities and actors described in the report was extracted from relevant websites and from documents and newsletters. If such sources of information were not available, contributions to the report were requested from the actors directly. All the entries in the report have been reviewed by appropriate people within the projects or organisations under consideration.

The report describes initiatives undertaken at a number of levels, including:

- United Nations initiatives, such as a number of United Nations Development Programme (UNDP) programmes, the United Nations Environment Programme (UNEP), and the women's fund of the United Nations (UNIFEM);

- gender and energy networks, including **ENERGIA**, the Mesoamerican Network on Gender in Sustainable Energy (GENES), and several African regional and national initiatives;
- regional and national NGO initiatives in Africa and Asia;
- international initiatives undertaken by NGOs, including those of Winrock International, Intermediate Technology Development Group (ITDG), and the National Renewable Energy Laboratory (NREL); and
- bilateral and other donor programmes, and a number of World Bank programmes that focus on energy, poverty and gender, such as the Energy Sector Management Assistance Programme (ESMAP) and ASTAE.

As noted earlier, the report is not all-encompassing. Especially in Africa, there are a number of gender and energy networks that were not included because their activities have not been well documented. In addition, inevitably, some national, regional, and international NGO initiatives on energy, poverty, and gender were left out. Some of these have already featured in **ENERGIA News** under "*International Programmes*" or in articles. It is hoped that these initiatives can be added to the report in the future.

The report will appear, along with other EnPoGen papers, on a CD-Rom that will be disseminated at the end of 2002. The report is also posted on the **ENERGIA** website (http://www.energia.org/resources/papers/major_actors-activities.html). It will be maintained and updated on a regular basis, provided resources permit. **ENERGIA** would therefore welcome revisions and new additions to the report to help in keeping the document up-to-date (contributions to be sent to a.koerhuis@etcnl.nl). ■

◆ For more information, please contact the authors at the **ENERGIA** Secretariat.

¹ E. Cecelski, *Enabling Equitable Access to Rural Electrification: Current Thinking and Major Activities in Energy, Poverty and Gender*. Briefing paper prepared for a brainstorming meeting on "Asia Alternative Energy Policy and Project Development Support: Emphasis on Poverty Alleviation and Women", organised by ASTAE, Washington DC, 26-27 January 2000.