

One Man One Megawatt, One Woman One Candle: Women, Gender, and Energy in South Africa

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This is a brief overview of the history, over the last hundred years, of women and gender in the energy sector of South Africa, taken from my recent doctoral thesis. South Africa is a society where race has overruled any other category of social organisation and is thus key in accessing privileges and resources, and so attention has to be paid to race as well as to gender.

The study starts with a description of women in the energy sector in South Africa in the early 1900s, when the majority of women, and in particular black women, were invisible users of wood, primarily in the domestic sphere. Men, on the other hand, were working in the public domain developing an already significant electricity industry, mostly for the benefit of the gold mines around Johannesburg. The study ends a hundred years later with the appointment of black women to two of the most powerful positions in the national economy: the Minister and Deputy Minister of the Department of Minerals and Energy.

The events that have shifted women from invisibility to top positions are significant. However institutional transformation is not necessarily accompanied by social transformation. Many women in South Africa still live in conditions similar to those of a hundred years ago, carrying wood and water for daily use probably over longer distances and with greater danger from gender-based violence than their grandmothers and great grandmothers before them.



Women have emerged as powerful participants and decision-makers in the Energy Sector - Ms Phumzile Mlambo-Ngcuka, Minister of the Department of Minerals and Energy, left, with Wendy Annecke, author of this article, right, and Mr. Duma Nkosi, Chair of the Parliamentary Portfolio Committee. (Photo: Courtesy of EDRC)

There are few causal links that can be drawn between women and energy. However a cursory analysis of the positions that women hold along the energy chain reveals male domination from power stations and chemical laboratories to technical teams and tariff/price negotiations in boardrooms. In the biomass sector, where most women are situated, women are seldom in control of resources. In terms of South Africa's commitment to gender equality, as spelt out in the Constitution, and in terms of South Africa's ratification of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996, women should be able to participate on an equal footing with men, and enjoy the same rights as men, in all sectors. My thesis tries to assess the progress we have made along this path.

A Feminist Perspective

The study brings a feminist perspective to bear on women/gender and energy studies and argues that feminist politics is what distinguished early South African gender and energy literature from other approaches. The definition of feminist used is broad enough to include those women who consider themselves Womanists or Blackwomen, since the primary feminist

characteristic would be to mobilise to make a difference to the conditions of women

One of the reasons that women/gender and energy studies developed somewhat differently in South Africa to the rest of the world was its pariah status and the academic boycott in place against the apartheid state in the late 1980s and early 1990s. South African energy researchers were not aware of the way in which the Women in Development (WID) approach was being incorporated into energy projects. Essentially the WID approach seeks to reduce women's burdens and offer women new opportunities. It can be observed in those projects that acknowledge the gender division of labour and assist women to fulfil their (specifically energy-related) roles and responsibilities towards children, men, and other women.

In South Africa, women's gendered roles were contested terrain. The liberation struggle was a struggle for political power. Women's emancipation and gender equality were also understood as a struggle for power, and the contest was framed in political terms. It was articulated not by development workers, but by women who were part of the liberation movement, so that the struggle between men and women was far more 'up

front' than in many other parts of the developing world.

Early South African gender and energy research reflects this concept of gendered relationships as a struggle involving co-operation and conflict. Later this understanding was reflected in the preoccupation with strategy: whether or not the delivery of energy services, and gender equality through the empowerment of women, should be written into policy and the goals of development (James 1991; Makan 1994; Crawford Cousins 1998). It was generally believed that while lightening women's burden was important, equality was unlikely to be achieved unless women's subordinate position changed. This specifically in relation to the burden of domestic fuel management and cooking, but also with reference to women's location in relation to men in decision-making structures and economic investment in the energy sector.

The unabashed challenge to patriarchy came from women of different disciplinary backgrounds working in the sector.

After 1994, gender struggles in South Africa became institutionalised and quite quickly 'women's issues' became depoliticised.

Around the same time, women energy researchers began to read and be influenced by international literature, and their own work began to reflect a much less political view of gender. Empowerment, for example, which had been a project of emancipation, became watered down and used instrumentally in such notions as women being empowered by solar cookers. Prior to 1994, enabling women to better do what they have always done would have been seen as trapping them further in the roles proscribed by patriarchy.

Part 1

The first part of the thesis explores the essentially masculine project of development following WWII. It observes that when the early, large infrastructure energy projects failed to alleviate poverty, one of the reasons given for their failure was that women had been excluded. Various approaches (WID /WAD/GAD/ GED¹ and post-modern) for the inclusion of women began to filter into energy for development projects. Through the examination of domestic energy use, the role of women began to be highlighted and attention began to be paid to 'women's energy needs'. The founding of *ENERGIA* in the mid-1990s demonstrated the determination of a group of enterprising women to put (and keep) women and energy on the international agenda. South Africa was not part of this.

In the 1980s, progressive energy research in South Africa was conducted by a group of men at the Energy and Development Research Centre, who insisted on the importance of energy provision for all the population, rather than a narrow emphasis on energy for strategic goals and the white middle classes, but they neglected gender issues.

The relationship between politically progressive research and feminist research was revealed, since these men neglected to find out how women perceived their energy needs, and instead took ready-made solutions (such as solar systems) into rural areas for women to use, and were disheartened by their failure.

Part 2

The second part of the thesis particularly examines the relationship between feminist researchers and the energy sector. It does this by evaluating the first three women-centred energy studies that were undertaken in terms of the demands made by South African feminists as well as against the backdrop of international understandings of feminist research. The three studies put women at the centre, and examined energy as one of the necessary daily requirements. They highlighted the energy concerns of poor women and, at the same time, they provided examples of gendered, hierarchical power relationships within households, communities, and society, which, although not directly related to energy needs, function to maintain and perpetuate women's subordinate position, and their inability to improve their own conditions. The studies ask whether providing energy services or challenging structural power relations will contribute more to the goal of gender equality. These women-centred studies introduced a new perspective, on energy *users* rather than energy *use*, and changed the way domestic energy studies were carried out.

Once women's invisibility in the sector had been raised, various attempts were made to redress this. The Women's Energy Group (WEG), started by Rita Mfenyane, was an innovative response to the lack of women in the negotiating forums that were constituted to develop new policies for the post-apartheid era. WEG members, in particular Sarah Ward, made a significant contribution to the development of new energy policy by designing and conducting a consultative process for 'the poor' including women, and developing policy accordingly. This part of the thesis ends with a look at the difficulties of sustaining a women and gender focus in research organisations which are used to, and comfortable with, masculine norms.

Part 3

The third part of the thesis will perhaps be of most interest to *ENERGIA* readers because it looks at factors that have assisted the progress and visibility of women in the sector, in particular:

- the major energy research programmes in South Africa since 1994 that have involved women as researchers and had women/gender issues as part of the project, and
- the impact of other strategies including the appointment of a gender-aware Minister.

1) The major research programmes and resulting literature for the period 1994-2000 can be divided into four categories:

a. Monitoring, evaluating, and assessment of energy use patterns.

This includes reports based on fieldwork: paraffin and wood studies, farm workers as a special category, the social determinants and rural electrification studies, comparisons between the satisfaction of grid and off-grid users, energy-use and income generation (Hansmann 1996; James and Ntutela 1998; EDRC 1998; Annecke 1998; Qase 1999).

The Role of Electricity in the Integrated Provision of Energy to Rural Areas, and The Social Determinants of Energy Use in Low-income Households in Metropolitan Areas, were two national three-year programmes that paid attention to energy use in low-income households. Both ran from 1995-1997, and saw women researchers moving into positions of qualitative and quantitative project leadership for the first time. This considerably increased the pool of women with energy research experience. These programmes were important because they influenced the manner in which domestic energy problems were perceived and solutions sought, and they provided the information needed for policymaking. Over forty reports were produced. Issues which came up regularly included the need to treat the household as a site of conflict and co-operation, to differentiate between the members of the household and note their ability to command labour, every day multiple fuel use, patterns of fuel and food consumption, energy and women's income generation, and issues of health and safety. In particular many questions were asked about the efficacy of electricity as a contributor to women's health.

It was found that the health care available to women in terms of clinics and staff had not improved significantly since electrification (Thom 1997; Ross et al 1997). However safety had improved since there

was a reduced likelihood of fires through using fewer or no candles. A benefit of electrification often mentioned was women's perceived ability to move around safely at night when there were neighbourhood lights.

Another finding was that electrification does not automatically produce conditions which lead to more-equitable gender relationships. Alleviating the burden of wood collection through the delivery of affordable electricity and appliances may be an improvement, but women are still responsible for food preparation and cooking among their many other tasks. However, it has been hypothesised that the *process of electrification* could be used to facilitate social changes, which could be conducive to more equitable relationships between men and women (Crawford Cousins 1998; James 1998). The *process of research* may also provide opportunities for men and women to raise issues they were usually silent about during interviews or community meetings with facilitators present. Having begun such a conversation, further engagement may bring about a change in relationships in the future.



b) Conceptual papers

There is a body of South African literature concerned with thinking about gender issues. These include Amita Makan (1994) on a gender perspective for energy planning, Bronwyn James's (1995, 1998) work on exploring the silences in development theory and the possibilities of empowerment in the electrification process, Crawford Cousins' (1998) consolidation and integration of rural electrification knowledge, and contributions to the Green and White papers. Others include the gender framework suggested by the conceptual review by Hooper-Box et al. (1998) of energy research methodology, and suggestions for an expanded and mandatory framework for gender and energy research; and Annecke's (2000) concept paper for the UNDP and her paper on women and climate change (2002).

c) Policy papers

These include Ruiters' (1995) audit of the race and gender composition of the energy sector, the women's energy budgets (Makan 1995; James and Simmonds 1997), and the contributions of women to the White Paper on Energy Policy. The two women's budgets pointed out that the energy budget has not been sufficiently 'turned around' since apartheid days, and still allocated less than 1% to energy for development and/or gender matters.

The attempts by women to influence policy have been documented by James (1999) and Annecke (2000). Efforts to engender new policy in South Africa were disappointing. A strategy to deal with hierarchical power was needed but not forthcoming. However, a framework had been devised to analyse energy activities and identify strategic leverage points at which intervention is necessary, or most likely to succeed.

d) Renewables

Perhaps the most disappointing research programme from a gender perspective was the Biomass - Plant for Life study (1991-1996), which was terminated after a long and inconclusive research phase without implementation being attempted. Women, who had been excluded from the study, were furious. At the final workshop they raised questions of empowerment and equality as well as delivery, and tackled the patriarchal and hierarchical powers head-on. They demanded that a 30% quota of women be mandatory on all decision-making forums concerned with energy and development. Little further work has been done on biomass for energy in South Africa. However, with the roll-out of Solar Home Systems and renewed interest in solar cookers, solar geysers, and renewable technologies, Winnifred Mandlazi, Marlett Wentzel, Tieho Makhabane, and Maryann Green have produced work on biomass, biogas, and solar technologies (see articles in this issue).

2) Other strategies: numbers and a woman minister

The last chapter of the thesis reviews the progress made by women at various levels and through multipronged interventions. It evaluates the extent to which poor women's energy needs have been met through the delivery of grid and off-grid energy services, and whether the ability to command labour and share tasks would make a difference to domestic burdens, especially of poor women. Since 1994, increasing numbers of women have entered the energy sector in decision-making positions. The electricity utility, ESKOM,

embarked on a pro-active women's empowerment programme and employs more than 21 women engineers in a variety of positions (Johnson and Fedorsky 2000). Some oil companies have also encouraged women's entry into the sector. However, the biggest breakthrough for women came with the appointment in 1999 of Ms Phumzile Mlambo-Ngcuka as Minister of the Department of Minerals and Energy. By the end of 1999 all men at the DME had signed a Gender Pledge, a unique and revolutionary document that places sexual politics at the heart of all daily activities and gender relationships, and requires men and women to work for equality. The Minister initiated an annual Technology for Women in Business (TWIB) award, and a landmark for women's participation in the sector was achieved when the first two days of the African Energy Ministers' Conference, held from 11-15 December 2000 in Durban, were devoted to the theme of Women in Energy (ESMAP 2001).

Looking Ahead...

The study closes with a reflection on the impact that the HIV/Aids pandemic is likely to have on energy planning, and some recommendations on how the relationship between research and policy should be strengthened so that policy reflects the government's commitment to gender equality and is adequately resourced.

In the last hundred years, some considerable progress in terms of women has been achieved in the energy sector in South Africa; women have emerged as powerful participants and decision-makers in several forums, but the fact that for many women conditions have not improved means there is still a great deal of work to be done. ■



◆ The author is also a guest editor for this issue. Her contact details are found on page 2

◆ All the papers referred to in the article can be sourced in the Annotated Bibliography of Women and Energy in Africa (2002) on www.energia.org