A critical look at gender and energy mainstreaming in Africa

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Introduction

Inequity along gender lines has been one of the main factors driving the establishment of womenfocused and, more recently, gender-focused programmes. The earliest and most pronounced recognition of the gender disparities in development was the announcement by the international community of International Women's Year in 1975 and its later extension into a Women's Decade. Since then various forums on women or gender have been organised and a lot of Iterature amassed. Women/gender and energy conferences and meetings have become common, with a wide range of objectives, including reviewing implementation of previous plans of action such as the 1995 Platform for Action. Gender mainstreaming has become a buzzword in development circles. Increasing attention to women/gender and energy is demonstrated by the incorporation of women or gender into various energy policies, programmes and projects at national, regional and international levels, including UNDP-Sustainable Energy and Environment Division, World Bank-Energy Sector Management Assistance Program, and FAO-Rural Wood Energy Development Programme, the African Development Bank, and the emergence of gender desks in national energy agencies.

On the one hand the world seems to be changing rather rapidly. Globalisation, characterised by privatisation and the free market, is creating a new order in which government control of the economy is decreasing. In the African energy sector, reform is rampant: institutional roles are shifting and new players are entering the market. The private sector is increasingly taking over the role of energy service provision from the government whose role is expected to become more facilitative rather than active. On the other hand, Africa is suffering abject poverty of modern energy service. For Africa to develop, and evade economic marginalisation, it needs to increase not only total modern energy consumption but also the total number of consumers accessing these services: both vertical and horizontal growth is necessary to address modern energy poverty.

Within this context it is imperative to ask whether the real energy concerns are primarily gendered, or whether there are other major factors. Is there a 'beyond gender' level, and how can Africa get there? Will the current women/gender and energy approach help Africa overcome the energy barriers to meeting sustainable development goals?

The women/gender and energy approach has been predominantly a Southern phenomenon. Why have the issues not attained similar importance in the North? The answer lies in the North's far higher level of economic growth and access to modern energy carriers. Energy services in the South are survival-developmental issues, a stage the North has passed. There, energy concerns are related to environmental implications, an issue not necessarily gender-sensitive.¹ As Martine and Villarreal (1997) highlight the rural and traditional loci of gender issues by extension render the related energy problems gender-irrelevant in the developed countries. This prompts the question of whether a gendered approach can address the real issues. Parikh (1995) justifies gender-related energy policies in developing countries on the basis that they are made necessary by the low incomes in these countries. If the problem is rooted in income, would a gendered approach to energy result in improving income levels? Does the approach stand the risk of masking the real issue; raising income for development?

¹ Some have argued that there are indeed gender and energy issues in the North manifested in the fact that women are more concerned about the environment than men and should hence be involved in the decision-making relating to energy options as this has environmental implications (Uhrike, 2001). It is worth noting, however, that the environmental debate in the North is quite open.

Historically, the Southern gender and energy approach is justified on the basis that women use energy differently from men, and that providing energy to women will improve their livelihoods; some have also argued that energy is a basic good (Clancy, 1999), implying that women are entitled to it as much as to health and education. This basic good view is contentious. WEC (1999) and UNDP/ESCAP (1990) recognise that energy is not a basic good though it is a useful input for satisfying basic needs. As the world transits into a globalised existence and the roles of governments vis a vis the private sector shifts with increased emphasis on the responsibility of the latter to meet energy demand, is the focus on women and energy be progressive in addressing the sustainable development challeng es?

As a result of the contexualisation of the energy problems as having a woman dimension, solutions have generally been crafted against this background, so that the general framework has focused on advocating and implementing a woman-targeted approach, both at the end user and decision making levels; advocating for increasing access to electricity to women, and, more recently, using decentralised electrification technologies as well as setting up micro-financing schemes to provide credit to women for energy and other needs. Hence, this chapter questions whether such strategies considerably improve the livelihood of the society and if they will enable its development in the future?

In an attempt to address the questions posed above, this chapter underlines the key challenges facing the African energy sector in order to understand the relevance of a gender approach. It reviews past approaches in the women/gender and energy debate, to gain insight as to how these have shaped current thinking, and into their ability to meet today's challenges. Recognising a tendency to use the terms 'gender' and 'women' interchangeably, and to some extent ambiguously, the chapter begins by highlighting the differences, as an introduction to how these terms are used in this book.

'Gender' and 'women': defining the jargon

The debates on whether to use 'gender' or 'women' has been rather energetic. Originally equity and social concerns were discerned as 'women' issues and not gender-related concerns. Later, proposals to replace 'women' with 'gender' emerged. The conceptual shift from 'women in development' to 'gender and development' reflects the recognition of the changing paradigm. Under gender and development the focus shifted from women to gender, and called for a re-examination of the structures from a gendered perspective. (UN, 1999). There are those, however, who prefer to keep 'women', on the basis that 'gender' draws attention away from the perceived victim – women. Regardless, in an attempt to give due attention to the disadvantaged majority, even while aware of the contextual differences between gender and women, there is a tendency to resort to 'women', or to use the terms interchangeably. Researchers and practitioners may in the foreground make an attempt to include men, often through such phrases as 'both women and men', but this approach is rarely sustained.

The aim of the discussion here is not to further elaborate on these definitions, rather to provide a basic understanding on the way the authors of this book have used these terminologies. 'Men' and 'women' are concepts which refer to basic physiological differences. Gender, on the other hand, refers to the socially constructed roles and socially acquired behaviours and expectations associated with men and women (World Bank, 2001). Gender, as a social construct, legitimises and sustains men's power over women and is hence inherently about relations between men and women. Societal institutions, households, and the broader economic space, including markets, collectively determine opportunities and life prospects for men and women.

Contexualising the gender and energy discourse

In parallel with the developments taking place within the energy sector, there were social shifts in the gender discourse which generally influenced the gender and energy progression. As Sachs (1996) notes vicissitudes of the international development debate follow the rise and fall of political sensibilities within the Northern countries. Gender is no exception. The wave of feminism became prevalent in the 1960s mainly in the United States of America and other developed countries, triggered by the economic and social changes associated with war. The work of Ester Boserup in the 1970's articulated in the publication *Women' s role in economic development* drew attention to the economic disparities between women and men, lack of integration of women in the development programs and the role of technology in this, in developing countries. This initiated the establishment

of Women in development (WID) networks in the North which later formed links with the South. Under the WID discourse women were the focal points and the number of women participating in a programme was a key indicator of progress. WID also generally considered women as a homogenous group. Shortcomings with the WID approach resulted in a divergent school of thought in the late 80's, distinguishing sex from gender. The emerging concept was largely referred to as the Gender and Development (GAD). GAD distinguished the social roles of women and men enabling understanding of the underlying mechanisms influencing development processes of men and women. Increasing global environmental concerns, motivated by the Brundtland report 'Our common future' (1987) captured the attention of ecofeminists on the link between environment and women, resulting in a Women, Development and Environment (WDE) discourse. The WDE placed women as the central focus of environment arguing that women have an affinity with the environment and are the best placed to safeguard it (Shiva, 1989). This discourse which has largely been driven and sustained by non-government and have profound knowledge of plants animals and the ecological processes (Dankelman and Davidson, 1989).

Sensitivity on women and gender issues motivated the establishment of forums for discussions of related themes. Starting from the 1970's international, regional and national forums targeting women and gender issues have proliferated. These forums have provided a platform for presenting thinking on women and energy, among other topics. Five major international conferences have been held since 1975, World Conference of the International Women's Year in Mexico City in 1975, the 1980 World Conference of the United Nations Decade for Women in Copenhagen, 1985 World Conference to Review and Appraise the Achievements of the UN Decade for Women in Nairobi, Fourth World Conference on Women in Beijing in 1995, and review of the Fourth World Conference on Women in Beijing in 1995, and review of the Fourth World Conference on Women in 2000. The outcomes of these forums have mainly been agreements or declarations, or plans of action. The 1975 Mexico City conference for example produced a World Plan of Action. Other significant documents include the 1995 Platform for Action, signed by the 189 governments attending the Beijing conference.

To sum up, the women and energy discourse may have been side effects of the larger gender discourse. As the discourse evolved, and in their attempts to market the ideas to the wider society, gender advocates sought to lodge women issues within existing frameworks. The southern gender perspectives initially thus linked gender with agricultural production as this was the dominant area of developmental focus. The important but exploited role of the woman as a source of labor for agricultural production highlighted the perspective. The rural household was the unit of analysis. In the context of the agricultural labor analysis, the burdens suffered by women in gathering fuelwood were noted and later used as basis for a women and energy focus.

Current energy challenges facing Africa

Two decades after a link between women and energy was established as critical to addressing the energy problems, the challenges seem to persist. Judging from the women and energy conference declarations, the issues hardly change over time (UN 1986; UN 1992; UN 1995; Durban 2000; CSD9, 2001; Heinrich Boell Foundation, 2001). It seems only fair to ask: why? To address this question it is imperative to contexualise what the real challenges in the energy sector are.

The key challenge facing the African energy sector is the provision of modern energy services to over 60 percent of its population, to facilitate economic development and poverty reduction. A significant proportion of the African population live in rural and peri-urban areas, where access to modern energy is lowest and its improvement most costly. Most of these people rely predominantly on traditional biomass fuels, (woodfuel still accounts for about 65% of the total primary energy consumption in the region (Awayemi, 1998) which are, generally increasingly difficult to access. This form of energy poverty is becoming common among a rapidly growing proportion of the urban population too. The poor inevitably bear the brunt of energy poverty, due to their limited flexibility to adapt to changing modern energy provision service conditions since they lack purchasing power. In addition, the current energy provision systems are relatively unreliable. In the electricity sector, for example, load shedding is a recurring strategy in many countries in response to the problem of insufficient electricity supply, even in the 'served' areas; this has major implications for industry and

the national economy, as evidenced in Kenya² and Uganda in 2000 (World Bank, 2000a; World Bank, 2001b). Most countries lack the capital to invest in new electricity generation facilities and have to rely on expensive external funding, which comes with various conditionalities (World Bank 1993; Edjekumhene et al, 2001; DOE, 1997). The same predicament is suffered in the fossil fuel sector. Many countries intermittently face liquid fuel shortages.

Africa exports over 50 percent of the fossil fuel energy it produces while at the same time importing energy at a cost that is crippling its economies. In 1997, for example, Africa commercial energy production was 13.25 million barrels of oil and its consumption was 5.7 million barrels of oil (DOE, 1999). The continent has significant energy resources that could be used to meet its needs; if exploited at current rates, the coal, oil and gas reserves could last 268, 98.3 and 28.2 years respectively (Davidson and Sokona, 2001). However, these resources are not equitably distributed, but concentrated in certain countries (in 2000, 18 of the 53 countries were not generating any primary fossil fuel energy). Nigeria, Algeria and Libya between them produce two -thirds of the regions oil output. Six out of the 53 countries produced more than 70% of their respective GDP in 1995 (Iwayemi, 1998). Clearly the resource is there but many go without. Thus the challenge is how to develop the infrastructure necessary to enable access to these resources and increase intra-regional energy trade.

Meanwhile, as noted earlier, responsibilities for energy provision are shifting with reforms at both macroeconomic and energy sector levels. Liberalisation of the petroleum fuel markets has resulted in government having limited control over provision of service and tariff setting in the petroleum sector. During the pre-reform era the government was responsible, through vertically integrated public utilities, for meeting a country's electricity demand. Power sector reforms are resulting in adoption of one or more of these elements: restructuring, unbundling of the sector, commecialisation, coorporatisation, and privatisation. The role of the public sector in electricity provision is expected to diminish and switch to a facilitative one. But electrifying the bulk of the unelectrified population will be prohibitively costly, particularly to the profit-driven private investor. Dedicated electrification agencies to address this issue have been proposed (Karekezi and Kimani, 2001) and countries such as Senegal have established such agencies, mainly funded from public and donor funds. These agencies are owned by the public and through them the government is expected to continue providing electricity to commercially unviable areas, particularly rural ones. Notably, in an environment where public funds are permanently in deficit, the challenge to provide universal access to electricity is likely to persist.

Although it is increasingly documented that energy service, and not energy *per se*, is the issue (UNDP, 2001; Wamukonya, 2001) providing an affordable and desirable service that elevates productivity remains a challenge. Provision of the energy service is not by itself a sufficient condition to meet development objectives, and the additional challenge is to integrate the appropriate energy service into national and sectoral development planning, while availing the other complementary factors to trigger sustained development.

In the face of these challenges, the previous question is restated: will the gender and energy approach serve the energy sector goals? In the following section, a discussion on how gender and energy has evolved is presented as background to dealing with this question.

Historical overview of the gender and energy linkages

The argument for a woman-focus³ with respect to energy is conducted mainly on the basis that women use energy differently from men (Parikh, 1995; Howorth *et al* 1997; Cecelski, 2000). One is tempted to ask whether this is because they are women or because they are poor; is it a predicament of the poor rather than of women *per se*? To such a question gender advocates are likely to answer that it is because they are both women and poor, and as women they lack access to resources accessible to men, thus warranting special attention. Since the 1970s some special attention has been paid to women in the energy sector with the aim of eliminating the inequitable burden they experience compared to men. Has this women-targeted approach helped women and society to

² In late 2000, supply to Kenyan domestic consumers was reduced to an average of 15 hrs per day and industrial consumers to eight hours on alternative days. The consequent economic costs were estimated to be US\$68 million per month.

³ Here the phrase 'woman-focus' is used instead of 'gender-focus', since the initiatives have targeted women on the rationale of attaining gender equity.

The energy crisis in the 1970s focused some attention on biomass energy, particularly woodfuel, (Leach and Mearns, 1988), and by extension on the rural energy dimension. The increased demand for woodfuel and the perception that demand outstripped supply and was responsible for deforestation, raised concern for what was referred to as 'the other energy crisis' (Eckholm, 1975), necessitating better understanding of the supply and demand situations. This saw the entry of the 'gap theory', which identified a gap between supply and demand, resulting in country forecasts that predicted critical shortages (O'Keefe and Raskin, 1985; Anderson 1986). Although the gap theory has been extensively challenged (Katerere, 1992; Bradley and Campbell 1998), it nevertheless formed the basis for defining the woodfuel crisis. This definition focused on the biological yields of biomass, ignoring the social economic, cultural and historical factors that influenced the management of the resource. The crisis was also simplistically defined in terms of the time and labour required to gather fuelwood. While reductionist, these definitions however helped raise attention among development circles on the level of human effort needed to acquire fuelwood.

The women and energy dimension was highlighted through work done by the International Labour Organisation and others in the 1970s (Cecelski 1984; Agarwal 1986; Eckholm, 1975; Cecelski, 1987). The debate was mainly captured and imprisoned in the rural household economics and time budget/labour discourses. The time spent, and the drudgery suffered, by women in gathering fuelwood for household cooking needs were highlighted as the main problems (Tinker, 1987; ILO, 1999; Bryson and Howe, 1993; UNDP, 1995; Horestein, 1989). Emphasis was also placed on the negative health impacts on women and children emanating from fuelwood collection and its use (Smith, 1987). These themes – women, time, drudgery and health, associated with fuelwood use – were taken up as the main gender and energy issues and have been propagated by consequent work. The gender and energy problem was largely reduced to a rural dimension, fuelwood and household cooking. There was inadequate acknowledgement of the fact that in households with financial means, women did not gather fuelwood: here this was done by paid help or the wood was bought and delivered to the house by motorised transport. The link between women and energy were presented in such a manner that made the associated problems appear obvious, self-evident, and later acquired a 'conventional wisdom' status with legitimised predetermined solutions.

To address the woodfuel crisis, and the consequent problems for women, the logical solution was to close the gap through supply and demand management strategies (Katerere, 1992). The specific solutions were tree planting and production and dissemination of efficient biomass stoves. The emergence of the 'energy ladder'⁴ theory (Hosier & Dowd, 1987; Leach 1988) raised the prospect of an alternative solution, fuel-switching (Dickson & Baldwin, 1990; Foley, 1997; Chomitz & Griffiths, 1997). The ladder theory highlighted the importance of income as a determinant of fuel choice. However, the ruralisation of the women and energy issue, a context where the monetary economy is weak, meant that fuel-switching received little attention among gender and energy advocates, since it was largely seen as an unattainable alternative. So an early appreciation of the link between energy service as a critical input for income generation leading to economic development and gender equity was somewhat missed.⁵

Having identified the solutions, donors and governments designed and launched projects and programmes on tree planting (Foley, 1997), and promoting improved biomass stoves (World Bank, 2000d; ESMAP, 1997). Women were regarded as a special target group, to which donors and NGOs directed aid in various ways. They were the main target group for wood-saving stove programmes and eventually also of rural afforestation programmes. The stoves in particular received a lot of attention from donors (Barnes et al 1994), and women were seen as the main beneficiaries (Eckholm, 1983). Project performance was not particularly good, and the reasons identified included poor targeting (i.e. women were excluded), inappropriate technologies, and men not meeting their responsibilities (Agarwal 1983; Wood, 1987; Cecelski, 1984; Hoskins, 1983; Tinker 1992). Despite various reports on the poor performance of stove projects and the documentation of the associated reasons (Barnes et al, 1994; Jones 1988), these projects have continued to attract support. The G8 renewable energy taskforce report recommends use of advanced biomass cooking stoves which they

⁴ It should be noted that this theory has been widely questioned and replaced with the multiple fuel-use approach.

⁵ It is increasingly generally acknowledged that gender-specific issues are not particularly important in higher economic development societies (Parikh, 1995; Roehr 2001) thus acknowledgement of the link could have provoked more critical analysis of the gender and energy approach.

note can reduce fuel consumption by 40% or more (G8 report, 2001). Mali had a US\$11 million project financed through world bank and bilateral loans implemented in 1995-99 where one of the key components was to deploy improved wood stoves (GEF, 2000). The improved biomass stoves are noted to result in fuel, financial, labour and time savings (ESMAP, 1991; Habermehl, 1994; Klingshirn, 2000). It is perhaps important to note that the stated financial savings occur in areas where the fuel is purchased, and even then the amounts saved are relatively small. A study undertaken for DFID covering Ethiopia, Kenya and Uganda concludes that urban households using improved charcoal stoves saved 0.6-5.6% of the household total income, and that the improved stoves do not lift people out of poverty (DFID, 2000). In addition it is important to question the validity of getting loans and grants from multilateral organisations for such technologies that cost less than US\$10 (G8 report, 2001) and save households less than 1US\$ per month, especially since the countries tend to be 'neck-deep' in debts.

Lack of land tenure was noted as one of the barriers to women's ability to increasing production of woodfuel since they would not own the trees, and men would use wood for purposes other than fuel (Fortmann and Rocheleau, 1985). Ownership of land does not, however, guarantee access to fuelwood, since the competition for land for food and more beneficial outputs compared to fuelwood has meant that farmers give low priority to trees for fuelwood (Dewees, 1993). Increased demand for cash necessitates trading most farm products and in communal lands most of the forested land has been cleared, so that even if women owned the land their access to fuelwood might not necessarily improve. In fact if women had tree tenure and planted and used trees for fuelwood under such circumstances (instead of selling them for timber) they would be economically irrational.

Although women and energy concerns did extend to include urban areas, the focus remained predominantly biomass-oriented. Concerns about the impact of the urban biomass energy consumer on rural women was one of the original motivations. The solutions remained the same, with particular emphasis on the improved biomass stoves. But the fate of the women, and the household energy poverty situation, has hardly improved. Clearly the situation has not been advanced by the fact that biomass has normally been treated as the fuel of the poor (Katerere, 1992) and predominantly as a household issue, and thus not given sustained attention. A study by UNDP/ESMAP (2001) concludes that, in spite of the emergence of new technologies such as solar energy, there has been little improvement in decades in the energy household sector. Environmental concerns may elevate biomass energy since it is potentially environmentally friendly and thus draw more attention to the household energy issues.

Electrification, and particularly rural electrification, has been another energy aspect that has brought gender into focus. Electrification has been justified on the basis that it results in economic progress, but recent thinking has acknowledged that electricity is insufficient, though necessary, catalyst for this. Some have characterised electricity as a basic good necessary to empower women (Clancy, 1999). Cecelski (2000) calls for rural electrification on the basis that it would meet women's needs for labour-saving, for time-saving, for improved health, for security and for income. Notably though, rural electrification and to a larger extent peri-urban electrification has not necessarily resulted in 'extensive use' of electricity due to various constraints (Mehlwana, 1997). In the majority of electrified households, only lighting, radio and TV services are met with electricity while most other energy needs continue to be met with other energy carriers (Wamukonya and Davis, 2001). As such, electricity cannot be a basic good but rather a high quality and expensive energy source that only becomes appropriate at higher levels of income or productive potential (UNDP-ECA, 1990). Thus it would appear that electricity can empower a society only if the necessary complementary factors are available. Advocating for electrification of women would hence not address the fundamental sustainable development issues.

The disperse settlement patterns, low load demands and uneven terrains have largely made rural and peri-urban electrification via grid-extension financially prohibitive (World Bank, 1975). Technological advancement towards decentralised systems has technically removed this barrier. However, these systems are not universally viable. The micro-grid diesel genset for example has been rendered largely unviable due to difficulties in accessing spare parts, technical support, and high costs of fuel transportation (Lovejoy, 1992). The growing concerns on global warming are favouring renewable energy technologies as the decentralised technological option. Notably though there is a wide range of renewable energy technologies solar home systems seem to be the dominant

decentralized technology promoted in Africa, often on the justification of cost-effectiveness⁶ (Erickson and Chapman, 1995; Trieb et al, 1997; Gope et al, 1997; Muntasser et al, 2000). One of the barriers to accessing the solar systems is capital cost. In view of this, governments with assistance from donor grants and loans have established innovative financing mechanisms to provide loans to consumers. Despite these, there have been concerns that women are unable to access credit for solar home systems and the ensuing electricity (Cecelski, 2000). In response, facilities targeting women have been established (Turyahikayo & Sengendo, 2001) and in other cases concerted efforts have been made within existing frameworks to reach women. However, the extent to which these systems could be considered as meeting the electrification goals is suspect. These systems have hardly been more than consumer goods, unable to generate income for the beneficiaries (Wamukonya, 2001). While solar home system electricity might improve household welfare with respect to better quality lighting, the costs have been quite high compared to conventional electrification systems (Villavicencio, 2001; Wamukonya & Davis, 2001). Women or men accessing loans for the typical solar home systems end up with highly costly energy sources for extremely limited services. Overall, it would appear that advocating for energisation or electrification in isolation will not bring long-term benefits for men or women. Instead, promoting energy as a service within a conducive environment is a preferable approach.

The initial focus on gender and energy was such that the household sector was the main concern. But more recently, increased attention has been paid to energy for entrepreneurship, though almost exclusively in small-scale agriculture and other micro-enterprises (Cecelski, 1991; Qase, 1999). This attention has mainly been tied to the use of biomass and the potential for fuel-switching in small-scale food processing businesses operated by women.

Surprisingly, the perception of gender and energy issue in the development circles remains very much ruralised. In an address to the Joint Strategy Business Meeting on 'Energy, Gender and Poverty Reduction' on 8 May 2001, the World Bank Vice President from the South Asian Region, in reference to the perception of the term 'energy', posed the questions 'Where is the gender in this image? Where is the woman?'. In answering this question she located *only* the rural poor woman with no alternative other than fuelwood for cooking suffering drudgery in the procurement and use of fuelwood. (Nishimizu, 2001). It is hence no surprise that improved biomass stoves remain important recommendations to the problems articulated as gender and energy problems. On the other hand, there is increasing concern in the women and energy and enterprise links. Towards this agenda micro-credit facilities have been established to provide women with finance to meet energy and other needs. The following section discusses the effectiveness of such facilities in addressing the core problem, poverty.

Energy and finance: targeting women, and the micro -scale dilemma

If a principal challenge for the energy sector is to provid e energy to reduce poverty, implying that provision of energy services is necessary for income generation, are the 'gendered' financing initiatives being undertaken likely to provide the desired results?

Access to finance for acquiring energy and other in puts for income generation has been cited as a key barrier to women's involvement in entrepreneurship. Lack of collateral and, more importantly, 'progressive' networks makes it difficult to obtain loans. A strategic solution that has been gaining favour is the establishment of women-only financial institutions, justified on the basis that women do not receive adequate attention in men dominated institutions. Another justification is the need to end women's dependency on loan sharks who demand exploitative interest rates, keeping women in a vicious poverty cycle (FUNDELAM, 1999). These institutions targeting only women tend to be operated mainly by women. As a result, they are generally isolated from the conventional maledominated business world, which limits networking and makes the opportunities to transit into normal business cycles difficult.

As a way of facilitating participation of women in entrepreneurship, their projects are evaluated less stringently than male counterparts, and projects that may not be financially viable are funded. For example, the Mpongwe women's bank managed by Credit Management Services Limited in Zambia does not undertake a detailed loan appraisal process but rather relies on the assessment and character reference provided by the women's club of which the applicant is a member (World Bank, 1999).

⁶ It has however been noted that renewable energy promoters often overestimate the cost of grid extensions, which is a better option for economic growth. (Smith, 1998)

The projects they invest in inevitably fail, leaving the women worse off than they might have been had the project never existed as they have to pay the loans from other sources. The failure erodes confidence in women as business entrepreneurs – both among women themselves and in the conventional financial institutions. While it may be important to make concessions for women, these should be done in such a manner that makes business sense and women are integrated in to the normal business world through addressing their weaknesses, such as business management skills and seeking good market outlets. As long as women are operating enterprises within the conventional environment, provision of kick-starting financial support is only a small part of the equation for a successful business.

Another particularly important aspect of the loans is their size. Most credit programmes established to serve women provide only small loans, normally insufficient to generate a sustained process of capitalisation. Credit Management Services in Zambia gives maximum loans of US\$250 per applicant (Ammuah 1999). The average loan size in 1999 by Get ahead (92%)⁷ in South Africa was US\$192; from Citi Savings and Loans (71%) in Ghana: US\$363; from ACEP (30%) in Senegal: US\$526; from Krep (58%) in Kenya: US\$878; from the Uaminify scheme in Kenya in 1997: US\$333; from EBA (12%) in Egypt: US\$841; and from CERUDEB (27%) in Uganda: US\$1110 (MicroFinance network, 1999; MicroFinance network, 1999b; Kiiru & Pederson, 1997). Most of the credit schemes rely on donor funding in a manner that reflects the original approach in the 1970s, when donors and NGOs provided special assistance to women in a primarily welfare-oriented approach. As such these agencies are also quite unsustainable. While there is rationale for providing small loans to the poor since they are high risk, there is the greater danger of entrapping them in this state. In addition this largely limits the choice of enterprise to a pitiable few.

The typical enterprises women invest in are food-processing, sewing, basket-weaving, etc, with little diversification across loan beneficiaries in a given area. As a result, competition is stiff, particularly since most of the entrepreneurs lack access to external markets. Increasing access for credits to women to purchase renewable energy technologies for domestic use and micro -enterprises is also being advocated (Cecelski, 2000). However, as noted earlier most of the focus has been on solar home systems that provide limited service and are basically consumer goods that do not, by themselves, offer opportunities for generating an income (Turyahikayo & Sengendo, 2001).

Overall, in most cases access to credit for energy has not particularly improved women's poverty status in any significant way. The micro-credit, small-player perspective seems to have been picked up by the New Partnership for Africa's Development (2001), which identifies improving access to credit by small-scale and women farmers as a strategy for promoting women. While the idea of extending credit to women is commendable, this should be done in an integrated approach if it is to yield sufficiently sustainable benefits and allow households to graduate from povert y.

Are women-decision makers the solution?

Having identified gender and energy as an issue of concern, one of the strategies to address it has been to increase representation of women decision-makers. Under-representation of women in all sectors has been blamed for not taking into account the gender dimension. The result has been to advocate women's inclusion in decision-making (this is included in most declarations from womenrelated conferences). The underlying assumption is that women decision-makers would address women's energy needs more effectively. Within this context it is imperative to ask: can increasing the number of women decision-makers in the energy sector facilitate meeting the energy challenges faced by the continent?

In the recent past, the number of women in decision-making positions has risen (UNIFEM, 2000), but there is little evidence that this has resulted in gender issues being addressed. In fact, Roehr (2001) notes that hardly any of the women working in the energy sector in the North address gender issues. This is not surprising since gender identities clearly affect one's effectiveness as a professional (Sweetman, 2001), as women's peers undermine gender-related issues. Engendering of policies is on the increase as a result of advocacy by women groups. The main indicator of this engendering has mainly been the number of times 'women' appears in the relevant documents (CSD9, 2001), but whether this is an effective indicator is subject to debate.

⁷ The percentages given in brackets indicate the share of women loan clients in the MFI.

Advocating for an increase in the number of women in decision-making certainly has its merits, particularly since it creates employment opportunities. However, using the number of women in any given institution as an indicator of representation has various drawbacks. Firstly, the representation system runs the risk of abuse, where nepotism and favoritism are used to select women who are therefore likely to become mere 'rubber stamps'. This weakens the whole decision-making process, to the disadvantage of both men and women. Secondly, women politicians and other decisionmakers are not always able to alter energy decision-making to cater for gender concerns, mainly because of a general lack of comprehensive understanding of the policy impacts, and interference by stakeholders with vested interests. Thirdly, since the proportion of women professionals in the energy sector is relatively low, focusing on having women on board as a pre-requisite for addressing gender concerns may derail the issue, if there is indeed an issue⁸, and reduce opportunities for open dialogue to establish what the main concerns are and how to tackle them. Even where there are affirmative action policies or quotas reserved for women, it is difficult to get qualified people. While more resources have been invested in educating the girl child in the mid 1990s, in sub-Saharan Africa there are indications of a decrease in female enrolment in secondary schools. Increased indebtedness has contributed to this decline. Obviously, it will take a while before there can be a critical mass of women professionals in the energy sector. But as noted the energy issues are not so much about women as they are about poverty. Hence, a woman professional will necessarily be a better candidate than a man in the energy sector if she can design and implement frameworks that use energy to alleviate poverty.

A strategy that has also been used to increase the participation of women, as well as raise the profile of gender issues in the energy sector, is the establishment of gender desks in the energy and other ministries (UN, 1995), staffed almost exclusively with women – as in South Africa, for example. Despite a shift to gender and development, this is a typical reflection of the women in development approach, which found expression in small female-staffed gender cells devoted to women's projects (Sweetman, 2001). These offices are meant to integrate gender into policy and action plans. However, they tend to be isolated, and without links to other relevant ministerial or external (utility, for example) stakeholders. Other staff members consider these offices as dealing with 'women's affairs', issues they regard as not relevant to themselves and their work. As such, the gender offices remain largely figureheads, with little influence on the energy agenda. If they are to function effectively there has to be a broadly shared understanding of the issues and tools to effect change. An important element would be to employ both men and women. Most of the energy-gender offices lack dedicated budgets to operate, relying instead mainly on donor funding. The intermittent nature of such funding makes it difficult to have an impact since there is no guarantee for continuity of the necessary projects, such as awareness-raising.

The division of labour across the different stakeholders under the reforming energy sector necessitates questioning the role of a gendered approach in furthering development goals within this context. When the entire national mandate on energy was centralised under a government ministry, management of various issues was relatively more controlled. Today, the private sector has become an increasingly important player in the energy sector. Its motivation is normally profit-making and gender equity *per se*. As a profit -maker, the aim is to create sufficient demand to make the returns on investment worthwhile. Hence, clients, men or women are served by the sector as long as they offer an opportunity for generating returns on the investments. The role of the private sector in the power sector was in the past artailed by regulatory structures which only recognised the government utilities as monopoly players and did not allow for competition.

Approaches in a changing world

The concept of global villagisation militates against an open approach to gender and energy issues, since changes beyond national and regional borders have major ramifications for the livelihoods of African society. So far, the gender and energy approach has been largely implemented as a woman-targeted approach, and with significant emphasis on energy rather than energy service.

Emphasis of gender and energy interventions in the past has been on women as recipients of project and programme benefits (UNDP, 2001). Meetings and conferences on women and energy have focused on inviting women participants at the expense of men – the UNEP Women Leaders On

⁸ In this chapter I have tried to demonstrate that it is not a gender and energy issue but rather a socially entrenched poverty issue where energy is just but one input.

Uptake of Renewable Energy Technologies, held from 27 June to 4 July 2001 in Australia, is a good example. However it is important to question whether this women-caucus strategy is socially beneficial, and the extent to which it advances the energy poverty reduction and development agendas.

The isolationalist approach assumes that these are women's issues rather than social issues and that once the woman articulates the problem, she would be able to effect the solution. But if the problems are gender-based, resulting from prevailing inequitable practices, would the underlying social fabric not have to be part of the solution? It is useful to acknowledge that processes that confer privilege on one group versus another are often invisible to those upon whom privilege is conferred (Connell, 1998). Hence, efforts to incorporate gendered thinking into *energy and* development requires more than a focus on women: what is also needed is a focus on men (Greig et al, 2000; Sweetman, 2001). In addition, there is growing evidence that targeting women can result in a backlash of resentment by men against what they see as excessive emphasis on women in development programmes (FAO, 1998). Notwithstanding, the changing economic status in Africa has caused social upheaval, as men lose jobs and have to rely on women to support the household, further justifying the need to economically empower both men and women especially for the sake of social stability (Silberschnidt, 2001). A significant share of the retrenched men lacks the capacity to adjust by going into alternative income-generating ventures. They are often forced to return to the rural areas or join the majority poor in urban slums, hence competing with women for the meagre informal incomegenerating opportunities that exist (ILO, 1999; ILO 2001; Silberschmidt, 2001).

The energy challenges that Africa is grappling with are anchored more within the overall development context than the energy sector in isolation. Opportunities for the energy sector facilitating lifting the population out of poverty lie in providing useful energy services in an environment where the service can be used to generate income. Thus, energy planning will have to be done in collaboration with the main economic sectors. It is important that energy planners realise that they are planning for energy service provision, and not for fuelwood or biomass or energy or even electrification. The service -oriented approach highlights the interlinkages between energy and other developmental priorities typically within the mandate of other sectors such as health, agriculture, transport and water. This will require a conscious institutional shift in mindset where the energy sector views its role mainly as facilitator and not a determinant implementer in control of outcomes. Within this context, as Hosier (1992) emphasises, energy planners must realise that not everything will be directly under their control, and that they need to understand the decision-making frameworks of other sectors and work closely with them.

Undoubtedly, reform in the energy sector makes implementation of a service-oriented approach a considerable challenge, since the matrix of players is more complex than in the pre-reform period where the government was the dominant and determinant player. Many countries are establishing a regulator responsible for ensuring that the stakeholder interests are taken into account, and the regulator can create the links between energy and the key sectors. While the goal may not have been advancing gendered interests, the regulators have been instrumental in forging necessary relationships. In Zambia for example the regulator has been able to intervene on behalf of the mining companies to shift responsibility of serving households from these companies to the government. In South Africa the regulator negotiates electricity tariffs on behalf of the industry sector and also facilitates the establishment of independent power provision in main sectors. It is unlikely, however, that the modern energy needs of Africa's unserved majority will be met through the conventional reform processes unless concerted efforts are made towards this agenda. As such, government intervention, through schemes that could be overseen by the regulator, is needed.

Conclusion

Most of Africa is struggling to attain and more importantly sustain reasonably positive growth rates. To accomplish this goal the continent needs to significantly increase investments in additional energy infrastructure that can support access of modern energy for both income generation and social development. But the larger part of the continent lacks ability to mobilise local capital for such investments and has largely relied on external loans and grants for energy exploration, extraction, conversion and transmission. While privatisation of the sector had promised to not only improvements in access but also release of public funds for other social development projects, these goals seem illusionary, particularly with respect to power sector (Wamukonya, 2002). This implies that public sector will have to continue playing a financing and regulatory role in the energy

provision through a pro-active public private partnerships which focus on energy service for economic development. However public finance has become increasingly scarce as governments are forced to cut down on expenditure as a conditionality for accessing multilateral and donor funding. The cost of external loans and grants has escalated particularly due to rising interest rates. As such governments will have to allocate resources more efficiently than in the past. It is within this context that the gender and energy approach needs critiquing.

The gender and energy approach may have raised some issues to the forefront such as the drudgery suffered by women in gathering firewood. But in contexualising and defining the energy problems from such perspectives, this approach may have masked the real issues and misdirected resources. Energy is an input to development but an insufficient condition for development. That women suffer energy problems maybe the case. That they are experiencing these problems merely because they are women is subject to debate. While there maybe traditional cultural factors tying women to cert ain tasks and hence curtailing employment mobility and flexibility, improvements in income levels are particularly important in determining the relationship between energy and women. In addition location of the household or for that matter the woman energy consumer is an important determinant in energy choice. In households with higher income women can employ men or women to procure energy and where alternative modern energy carriers are available, they switch to these fuels.

The gender and energy approach has resulted in interventions that focus more on energy rather than the service as well as more on the woman rather than the context in which she is in. As such, the technological fixes namely improved biomass stoves and more recently solar homes systems, and the increase of certain energy carriers in isolation of the development context have hence achieved marginal results. Clearly the de-link between the approach and development is not unique to the gender and energy paradigm but rather to energy is general. Give the challenges facing the continent it is imperative that energy investments be linked to key services including health, water and agriculture with the ultimate goal of alleviating poverty. This shift acknowledges that the energy problem is not a household problem, it is not a women or men problem, it is a developmental issue. Such a shift calls for institutional restructuring especially in planning and implementation which entails closer cooperation across different sectors and a full understanding of the macro rather than the micro development framework. The programme rather than the project funding approach being advocated and implemented by donors could offer a good start if planned in a down -up approach where the staff from the local sectors are involved in structuring from its onset.

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