Safe and Sustainable Energy for All – Gender Equality in Choice, Access and Control

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"A change in the energy production paradigm is necessary, and women should be at the forefront of the energy revolution."[2]

1. Introduction

Energy is an essential and fundamental component of daily life. Absence of sufficient energy can drastically and adversely affect every society, across the world. On the one hand, the current energy cycle based on fossil fuels and nuclear often leaves a trail of devastation behind and is one the main causes of global warming. One the other hand, the use of traditional biomass can have negative impacts on people, ecosystem and the planet. Another issue of concern is violent conflicts caused directly or indirectly by quest for energy resources, and the negative and often traumatic impacts on women and children.[3] We, therefore, need to change the way we use energy, apply energy saving and energy efficiency measures and utilise renewable energy. We also need to create access to safe and sustainable energy all over the world as an essential driving force of sustainable development.

Access to modern and reliable energy services remains essential for sustainable human development, economic growth, higher quality of life, and better delivery of education and health services. Access to energy is essential to reducing poverty. In the absence of energy services, the rural poor must resort to the use of traditional biomass sources—such as wood, charcoal, dung, and waste materials—for cooking and heating. The IEA estimates that 2.5 billion people in developing countries continued to rely on traditional biomass to meet their energy needs in 2004; more than half of them are in the PRC (700 million) and India (565 million) (www.adb.org energy policy).

Women represent the life-giving and conserving aspect of human nature. In most developing countries, they spend long hours in survival activities such as fuel, fodder and water collection compared to men. They are also more involved and hence judicious, in the utilization of natural resources. Most women in developing countries have expertise and practical experience on how different fuels burn and how to use them optimally. Yet, in many cases they face energy poverty more severely than most men do. While men and women benefit equally from energy inputs, the reasons why they need energy and the ways in which they use it differ considerably. While most countries do provide for equal individual rights for men and women with respect to their access to energy resources, there are barriers when it comes to

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[2] The Hon. Ms. Elizabeth Thabethe, Deputy Minister, Department of Trade and Industry, Republic of South Africa, speaking at the 'Power Kick for Africa 2011' conference held in Nigeria, in June 2011.
[3] compare http://www.ippnw.de/frieden/energie-krieg-frieden.html

their actual realization. Women's rights to clean and safe energy are mostly suppressed due to unequal gender relations.
The gradual depletion in biodiversity, decrease in agricultural income and ambitious urban opportunities leads to rural men's migration in search of greener pastures, leaving women to take on the additional burden of finding alternate means to meet their family's energy and economic needs. However, the domestic activities performed by women, being unpaid family labour, are not quantified or measured and do not find a place in the energy system. While women's energy related requirements and activities were traditionally well recognized, they were not highlighted in energy policies until the last decade. Women themselves mostly underestimated their contribution and the importance of their own health while catering to the family needs. Moreover, educational constraints, cultural barriers and economic dependence also resulted in unequal distribution of control and benefit between women and men in the energy sector.

This paper shows the importance of integrating gender in energy policies and bringing women`s perspectives and the need for clean, sustainable and safe energy access for women all over the world. This chapter also includes some examples of women's resistance against harmful energies, as further explained in the chapter on unsustainable energy. It presents background information on the indicated issues and closes with policy recommendations to feed into the global process of developing Sustainable Development Goals.

1.1 Global Energy Access

Africa

A large segment of the African continent's population, especially in SSA and in the rural areas of the continent's middle-income countries, lives in conditions of acute 'energy poverty'. Less than 10% of the SSA rural population has access to modern energy services. Just over 20% of the population overall is connected to electric power supply. Biomass provides over 80% of total domestic primary energy supply across the sub-region – even in major petroleum exporting countries. Electricity contributes less than 3% of total final energy consumption (AfDB, 2008). In Sub-Saharan Africa, about 7 million people use improved cook-stoves. Although this seems like a large figure, 615 million people still rely on traditional biomass and only 132 million have access to modern energy (www.cleancookstoves.org). The continuing dominance of biomass – wood fuel, dry shrubs, agricultural residues, and sun-dried animal dung – is due to the limited access to electric power supply (AfDB, 2008).

Asia

Seven hundred million people in Asia have no access to modern electricity. Compounding the problem is widespread energy poverty across Asia with almost a billion people still without access to electricity. Another major issue is meeting energy demand and providing access to modern forms of energy to all. About 1 billion people in Asia and the Pacific lack such access. Clean energy investments in 2010 reached $1.76 billion with access-to-energy projects exceeding $950 million, up from $418 million in 2009. Between 2003 and 2009 such assistance connected 1.27 million households to electricity (www.adb.org).

Latin America and the Caribbean

Latin America and the Caribbean are rich in energy resources including hydrocarbons, hydroelectricity and biofuels. But this wealth is unevenly distributed. Approximately 40 million people lack access to modern electricity services, and fuel imports consume a growing percentage of smaller countries' budgets (www.iadb.org)

Eastern Europe, Caucasus and Central Asia

Women and men rely on energy and benefit from safe energy access in different ways. For example, in rural areas of Ukraine, women spend 10 times more time on getting enough hot water to fulfil all their duties in the household (washing dishes, laundry, feeding animals, hygiene)[4]. If a household has access to safe and sustainable energy, women and children benefit more as they:

- spend more time inside the home
- undertake general household chores including cooking, and suffer therefore less diseases linked to indoor air pollution as well as coldness and dampness

1.2 The Problem

In many developing countries, culture and other societal structures have placed the responsibility for collecting fuel and water for household use, and many other household chores including caring for children on women. Energy-related hardship is more exacting on women than on men due to the nature of their domestic duties. The following problems arise as a result of lack of, inadequate access to modern energy, as well as use of inferior fuels for cooking and space heating in developing countries.

1. Energy and Health

Indoor Air pollution

Women and children in developing countries are exposed each day to pollution from indoor cooking smoke, in the form of small particulates, up to 20 times higher than the maximum recommended levels of the World Health Organization (WHO) and other environmental agencies around the world. Smoke from cooking fuels is estimated to account for nearly 2 million deaths, more than 99 percent of which occur in developing countries. This means that a significant percentage of the annual burden of disease is caused by cooking smoke. Because mothers and their young children are the main household members who regularly breathe such cooking smoke, they are disproportionately affected by the related health issues (World Bank, 2011).

In many rural communities in South Asia, wood for fuel remains the prime source of energy and women often walk great distances to gather increasingly depleted supplies. Exposure to wood smoke in kitchens seriously affects women's health and their ability to earn an income (www.adb.org). Children's safety and family health are primary concerns of women. Their routine work such as food preparation exposes them to indoor air pollution and food pathogens. Home maintenance makes them more vulnerable to energy pollution and waste contamination. The use of traditional fuel-wood, dung and waste (tar, plastic and other waste) as energy source for the cook stove in the home, creates indoor pollution.

[4] http://www.wecf.eu/english/articles/2011/10/solarcollectors-ukraine.php

The link to education

A joint study undertaken by Jyoti Parikh, Soudamini Sharma and Chandrasekhar Singh in Himachal Pradesh state of India shows an interesting link between illiteracy and health problems. "Illiteracy apparently influences respiratory health, even in households using clean fuels, with illiterate women being at greater risk (12.5% with symptoms) than literate women (5.2%)". Himachal Pradesh is one of the progressive states in India where (based on the above report) the status of empowered women in family/community decision making capacity is comparatively higher than other states. 91% of the surveyed area have infrastructure for clean fuel and 49% of the households have the facility to use the clean fuel through a public distribution system. However, only 31% of the household were actually using it. Out of the total families surveyed, 64% of households were of the view that clean fuels are very expensive, 22% were scared / hesitant to use them while 12% said that fuels were not always available. Linkages between health impacts and gender for various age groups have also been established. The study has revealed that girls below the age of five years and females in the 30-60 years age groups (who are usually the chief cooks in a family) are at higher risks than males in the same age groups.

Outdoor Air pollution

Outdoor air pollution is a big health threat in different parts of the world, e.g. in China and Europe, causing premature deaths and chronic bronchitis just to give two examples[5]. There could be a link between exposure of women to outdoor air-pollution and the too low birth weight of their new-borns.[6]

Environmental pollution

The nuclear energy chain destroys lives and habitats. It can irreversibly damage our health and our genes and therefore next generations to be born from women and men exposed to radiation, even very low levels. Nuclear energy is neither clean nor sustainable, as the many nuclear accidents and disasters have already so painfully shown."[7] Too many people live in radioactively contaminated areas, e.g. in Bryansk, Russia where hundreds of thousands of people still inhabit this largely agricultural area, and the greatest danger they face is the ingestion of radioactive particles (or radionuclides) that have accumulated in the meat, fat, and milk of local cattle, as well as the produce from local farms and gardens. In some provinces over 20% of all dairy milk is dangerously contaminated. Children receive the highest exposures to caesium, as they tend to ingest more dairy products than adults and their still-growing bones absorb more pollutants from their food.[8] Women and children are at significantly greater risk of suffering and dying from radiation-induced cancer than a man exposed to the same dose of ionizing radiation. There is no country to date where this women and children's increased risk is sufficiently taken into account in current regulation[9]. There is no *safe* dose of radiation. Studies agree upon strong gender differences in the attitudes towards nuclear energy use worldwide. The strong rejection of nuclear energy by women is based on their higher risk perception[9].

Energy Access and Poverty

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[5] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2685855/

[6] http://www.myhealthnewsdaily.com/3507-air-pollution-low-birth-weight.html

[7] Women Major Group Statement

[8] http://www.blacksmithinstitute.org/projects/regions/e_europe

[9] See the chapter on unsustainable energy and Biological Effects of Ionizing Radiation (BEIR) VII, Phase 2 report, "Health Risks from Exposure to Low Levels of IonizingRadiation," published by the National Academy Press in 2006, Washington, D-C.

There is also a strong link between energy access and cost, depending on the geographical location, size, structure, income and expenses. In some countries, cost of energy constitutes a significant portion of household expenditure, whereas, in other places energy is considered a part of overall rural existence and its access/cost is not identified as a separate issue. In a joint German/South African pilot study conducted by the South African Department of Minerals & Energy (DME) and the "Gesellschaft für Technische Zusammenarbeit" (GTZ), in three different areas of South Africa (one remote rural, one rural and one semi-urban), poor households (earning around US$70 per month) were spending 26% of their total income on meeting energy needs whereas the richer family (earning US$ 140 and above) spent only 7% (ENERGIA News June 2000). The reason for the poor spending more on energy was mainly because of the types of fuel they used as well as their patterns of income and expenditure.

Biomass use is closely intertwined with poverty. As their incomes rise, households in developing countries generally switch to LPG fuel and various types of specialized electric cooking appliances. Thus, income growth is one obvious answer to the problems of biomass energy use in developing countries. However, a doubling of typical incomes in a country would reduce the number of people dependent on biomass energy for cooking by only 16 percent, suggesting that the use of biomass fuel among developing country households will continue for years to come (World Bank, 2011).

Energy and Land

The extraction of fossil fuels (coal, oil, gas) causes negative impacts. Land is destroyed, people have to resettle[10], the environment becomes polluted e.g. in the case of groundwater via oil fracking (hydraulically fractured). On the German-Polish border area, the land of the ethnic group the Sorbs, 25000 people had to resettle because of the extraction of brown coal during the last 100 years[11].

Energy and Climate Change

Higher demand for energy must be met in a socially, economically, and environmentally sustainable manner. As is now generally recognized, the threat of climate change is real and increasing. The accelerating emissions of greenhouse gases, and their close link to average global temperature, are likely to result in significant changes in the mean climate and its seasonal and annual variability, both globally and in Asia. The impacts of rapid climate change are expected to be profound in Asia and the Pacific. From the Himalayan highlands to the rich tropical forests of Southeast Asia, and in the Pacific islands, many natural ecosystems are vulnerable to climate change and some will probably be irreversibly damaged. The poorest people within the large populations of both sub-Saharan Africa and South Asia are most vulnerable to the effects of climate change (www.adb.org *energy policy*).

Fossil fuels made the development of the industrialized countries possible, but have caused global warming and is a threat to the planet. Women have less means to protect themselves against the impacts of global warming as an estimated 70% of the world's poor are women. Therefore, climate change is a big threat to women. According to the Special Report on Renewable Energy Sources and Climate Change Mitigation of the IPCC[12] the health impacts of

[10] http://www.archiv-verschwundene-orte.de/de/ausstellung/die_ausstellung/69928
[11] http://www.archiv-verschwundene-orte.de/de/ausstellung/die_ausstellung/69928
[12] http://www.ipcc-wg3.de/special-reports/srren,

indoor air pollution will not decrease in 2020 - and the amount of people, who rely on biomass will not be reduced, even as more people come out of poverty, but due to growing populations, it will be around the same number of people who depend on traditional biomass. Of course, most of the people IPCCC speaks about will be women. But also findings about the impacts of black carbon on climate change[13] adds to the importance of improving the situation of women's access to safe and sustainable energy, as a lot of black carbon is emitted for household and cooking purposes.

Best Practices – Case Studies

BPC Lesedi (**Botswana**): This Company uses a franchisee system to distribute renewable energy technologies such as solar home systems, lanterns, improved cooked stoves (ICS) in the country. Three out of nine entrepreneurs are women franchisees. Services are extended to many households that are not covered by the grid.

Developing Energy Enterprises Programme (DEEP) (**Tanzania, Kenya and Uganda**): DEEP programme is working with very small micro enterprises. Most of these enterprises are non-registered (informal) businesses and owners have little formal education (usually less than secondary school level) and lack entrepreneurial and business know-how. The main technologies covered by DEEP are improved cook stoves, solar and briquettes. There are country level differences with regard to type of energy products and services sold or provided by the DEEP EA entrepreneurs. For example, almost 59% of entrepreneurs in Kenya, 35% in Tanzania and around 36% in Uganda deal with ICS products while Uganda has the highest number of briquette entrepreneurs (41%). Tanzanian entrepreneurs are more inclined to solar technology (51%), as opposed to 16% in Kenya and 15% in Uganda. Female entrepreneurs are generally less mobile than male entrepreneurs. As a result men have a higher level of access to information and ability to source products for sale. Female entrepreneurs tend to be engaged in businesses that do not need a high level of capital, use low technology and deal in products that can sell to immediate markets (GVEP).

Solar Sister (**Uganda**): Uses a direct marketing system made up of Solar Sister Entrepreneurs (SSEs): primary marketers and sales agents of solar lanterns and other solar technologies in rural areas. Solar Sister has an explicit focus on women in every stage of the technology supply chain (except for production), but its organizational mandate is to engage and empower women. A Solar Sister is an integral part of the supply chain, and sources, distributes and markets the solar products. The products are either fully manufactured and assembled abroad (d.light) or manufactured abroad and assembled in a local warehouse in Uganda (Barefoot Power). Product distribution mechanism is centered on women's existing networks (GVEP).

TATEDO (**Tanzania**) TaTEDO created one of its "for-profit" arms, SEECO (Sustainable Energy Enterprises Company), which manufactures and sells cookstoves and baking ovens. From 2000 through 2009, TaTEDO sold: 1,886,051 fuel-efficient cookstoves ; (about 70% of buyers were female), 122,680 fuel-efficient baking ovens (about 70% of buyers were female) and installed 212 solar dryers for which an estimated 60% of recipients were female. While women's engagement is primarily as end users, they also work in the SEECO factory and serve as individual technicians who manufacture the stoves and ovens. Women among TaTEDO's and

[13] http://www.c2es.org/publications/black-carbon-climate-change

SEDC's staff serve as trainers on the use of the solar dryers and baking ovens and business skills. TaTEDO's technology products have allowed women to be more productive in their existing income-generating activities (e.g., baking bread for sale). Additionally, the solar dryers (fruit & herbs) and baking ovens, in particular, provide women the opportunity to engage in new entrepreneurial work (Kirrin, G. 2012).

Smokeless Improved Stove - India

During 1982-85, the Government of India initiated a national programme on Smokeless Improved Stove to get over the energy crisis in rural India. The programme was implemented at villages where women used fire wood or cowdung cakes for cooking. A training module comprising of concept, construction, maintenance and repair of the improved stove was designed and the training was conducted in almost all states of India. All India Women's Conference, a national level NGO, was appointed the nodal agency for the government, for implementation of this project and they have been working on this project for the past two decades. This programme is still being continued in a few states but notably in Andhra Pradesh, where tribal women are being trained and are earning decent income. This initiative has reduced the drudgery burden as well as opened up income generation opportunity for rural women.

Other Asian examples: A growing number of ADB funded small, off-grid clean, renewable energy systems are offering rural women new livelihood opportunities. Projects include the training of female technicians to run solar power systems in rural **Bhutan**, strengthening the community management of rural electrification in **Nepal** and helping **Vietnamese** farmers convert animal waste into biogas to cut fuel costs, improve health, and raise productivity (www.adb.org).

Western Europe - example Germany

Germany was impacted by the Chernobyl nuclear catastrophe in 1984. Since then the awareness of the German people about the threat nuclear energy poses to life was always very high and the anti-nuclear movement very strong. Women have been always at the forefront of rising awareness of the risks of nuclear energy. They are the ones who mainly thought about what is still safe to give their families to eat, which is not radioactive contaminated or if it is alright to let the children play in the sand as it might be radioactive contaminated. They were confronted with all these daily decisions. This might be the reasons, not only after Chernobyl, but in general, women are more opposed to high risk technologies as they know and experience the threat more intensively than the men. So women have been important players in the anti-nuclear movement together with the men. After Fukushima and the protest of German citizens all over Germany, the government officially announced the process of assessing the risks of nuclear energy under the changed insights after Fukushima. They called for an ethical council. This council also came o the conclusion that nuclear power is a too risky technology considering also the fact that other, more safe technologies are available. On the 6th of June 2011 the phase out of nuclear was decided, the first time supported by all governing parties. Since then the German energy turnaround gets attention and needs to proof that the transformation from a nuclear and fossil fuel based system is possible. Also here the women are important players.

Eastern Europe, Caucasus and Central Asia (EECCA) - example

Women and men need to be good team players, if it comes to the solar energy project of WECF and partner in the EECCA region. The project uses a quote to have a balanced participation at the trainings on how to build, monitor, maintain and use a solar collector. The

training concept consists of joint parts of the training in terms e.g. about the awareness raising on the benefits of solar energy, but there are also different workshops on how to build a collector and the other one on benefit analysis, monitoring skills, maintenance and use. The choice of the workshop is open to men and women, but usually, according to their gender roles, the men go for the construction and the women for the monitoring part, but there are also always exemptions. Our goal is to show that both aspects are important, the trained people team up to a team for the follow-up of the training, building and monitoring of the solar collectors. By doing so WECF raises awareness about the possibility of choice and make different skills available to men and women. The beneficiaries of the project is the whole household as the people save money, but especially the women as they are the ones spending e.g. in a village in Ukraine 10 times more hot water than the men for cleaning and cooking and other household related purposes.

How to Address Women's Inadequate Access to Energy: Recommendations

The following commitments were made at Rio +20 Conference in June 2012 in relation to women, energy and gender:

125. We recognize the critical role that energy plays in the development process, as access to sustainable modern energy services contributes to poverty eradication, saves lives, improves health and helps provide basic human needs. We stress that these services are essential to social inclusion and gender equality, and that energy is also a key input to production. We commit to facilitate support for access to these services by 1.4 billion people worldwide who are currently without these services. We recognize that access to these services is critical for achieving sustainable development.

126. We emphasize the need to address the challenge of access to sustainable modern energy services for all, in particular for the poor who are unable to afford these services even when they are available. We emphasize the need to take further action to improve this situation, including by mobilizing adequate financial resources, to provide these services in a reliable, affordable, economically viable, and socially and environmentally acceptable manner in developing countries.

127. We reaffirm support for the implementation of national and sub-national policies and strategies, based on individual national circumstances and development aspirations, using an appropriate energy mix to meet developmental needs, including through increased use of renewable energy sources and other low-emission technologies, the more efficient use of energy, greater reliance on advanced energy technologies, including cleaner fossil fuel technologies, and the sustainable use of traditional energy resources. We commit to promoting sustainable modern energy services for all through national and sub-national efforts, inter alia, on electrification and dissemination of sustainable cooking and heating solutions, including through collaborative actions to share best practices and adopt policies, as appropriate.

We are all determined to act to make sustainable energy for all a reality, and through this, help eradicate poverty and lead to sustainable development and global prosperity.

We commit to actively promote the collection, analysis and use of gender sensitive indicators and sex disaggregated data in policy, programme design and monitoring frameworks, in

accordance with national circumstances and capacities, in order to deliver on the promise of sustainable development for all

1. In order to deliver on the above promises and to contribute to the development of gender sensitive Sustainable Development Goals in the energy sector the following proposals[14] are made:
2. We call for development and implementation of specific programmes targeting women currently without access to clean and safe energy.
3. We propose to build on the Sustainable Energy for All – global energy mix by 2030 through promoting the development and use of renewable energy sources and appropriate technologies in all countries, and eliminating (indirect) subsidies to unsustainable energy, fossil and nuclear. We call for development of binding safeguards to avoid negative impacts from renewable energies including pollution with agrochemicals and displacement of local communities and indigenous peoples.
4. We call for provision of adequate financial resources, of sufficient quality and delivered in a timely manner and a precautionary approach to the deployment of new technologies to developing countries for providing safe and efficient and wider use of diverse and appropriate energy sources, assuring specific capacity building and funding windows for women's access to safe and renewable energy. We call for removal of constraints limiting the ability of women to take advantage of business opportunities offered by new energy options, including legal and cultural barriers that limit their property rights, land tenure, and access to credit.
5. We agree that each country should work towards low-carbon development. We encourage more widespread use of energy planning tools to provide a robust framework for donors and partners to coordinate their development cooperation efforts. We call for full cost accounting of the life cycle of energy sources, including all externalities, from mining clean- up and closure to safe reuse of waste for all energy options.
6. States must take decisive positions from immediate decommissioning to phasing out of nuclear energy, and take the path of promoting the use of renewable energy. A legally binding mechanism to address the cost of decommissioning and clean-up of nuclear power-plants, nuclear waste and uranium mines should be committed. Redress and clean-up should be financed according to the polluter-pays principle. The entire nuclear cycle is threat to our generation and to that of our children. A UN rapporteur on uranium and nuclear risks should be agreed upon.
7. Women are greatly concerned by the technological solutions offered to climate change, including geo-engineering, many of which are motivated by profit. We request to include participatory and transparent mechanisms for assessing these technologies, using the precautionary principle and a gender perspective to examine, the dangers.

Specific gender-sensitive, binding international and national measures below would greatly improve women energy situation in developing countries and lead to sustainable energy for all.

1. Development of binding policies that ensures healthy and sustainable livelihoods for women, in particular through halting use of unsustainable, radioactive and harmful substances and technologies.

[14] Adapted from the input to the zero draft for Rio plus 20

2. Creation of access to clean, efficient and safe energy, for all, especially for women.
3. Improve women's access to energy services and technologies that can make household tasks less arduous.
4. Establishment of an independent technology assessment organisation with the mandate to assess, control and, where necessary, limit use of technologies before widespread use, based on the precautionary principle.
5. Development and implementation of global mechanisms for the protection of the global commons, including clean-up of harmful pollution.
6. Upscaling of decentralized energy technologies by global and national institutions.
7. Development and implementation of specific targets for women with regard to technology training, business management skills and extension services.
8. Create extra funding windows to address access to safe and climate friendly energy options at the household and community level with a focus on women to improve women's situation and to address the problem of black carbon.

CONCLUSION

There has been a definite paradigm shift in the energy sector over last decade, with the development of technology and access to education, women are now actively participating in the energy profession in many countries. From being household energy managers, users and suppliers, there is also a drive for women becoming significant energy entrepreneurs. Women are managing funding agencies in a number of donor countries and supervising alternative energy projects in many developing countries. Civil societies and Non Profit organizations have played a crucial role in bringing about this change. Alternatives and options continue to be explored and developed to solve energy problems worldwide. Energy practices and policies now focus on a broader range of quality and access issues rather than on traditional technical and supply concerns. However, there are still gaps between the policy and implementation level and a stronger need for efficient enforcement.

Inevitably, the skewed division of power and responsibility hampers women's ability to engage in and influence all the decisions that might affect them, and this includes addressing their own basic energy needs. Under such circumstances, any additional energy shortage will create even more difficulties for women, and affect women more than men. It is therefore imperative that the gender perspective is reinforced at the policy level with respect to energy production and distribution.

Clean and safe energy needs to be considered an essential human right. An integrated equity based approach by countries towards energy can uphold, protect and promote access to basic energy services. The energy issue is also linked with the prevalent cultural and social norms that shape rights for women and influence legal frameworks. In 2010 UN Secretary General's Advisory Group on Energy and Climate Change (AGECC) called for commitment and action on two goals; "universal access to modern energy services and reduction of global energy intensity through energy efficiency measures". There needs to be a concerted effort from regional, national and global agencies to ensure equitable policy framework for fair disbursal and judicious consumption. Advocacy among women in rural regions on equity, energy resources and options is most essential. Renewable energy techniques, which are also linked to income generation, should be further subsidized and popularized. Access to finance needs to be liberalized and capacity building resources be improved to encourage more women to become energy entrepreneurs.