

Energy as a Linchpin in Critical Sectors: Bringing A Human Face to Energy

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Friends and Participants,

I am deeply honored to be with you today, and to have been asked to provide the opening remarks to this workshop on Gender and Poverty Reduction which is taking place in the context of the World Renewable Energy Conference. I want to personally thank Sheila and Barbara for putting together such an exciting program for this workshop.

In exploring the critical role of energy for poverty reduction, I will first introduce the notion that energy is a human right. I will then explore how we can Change the Face of Energy through the opportunity provided by the Millennium Development Goals Framework. Then, I will share some thoughts with you how we could envisage a new “energy ladder” for gender equity in energy.

Introduction: Energy is a human right

Energy is a very broad field, which encompasses a very broad array of needs, technologies, products, services. When discussing energy in development issues, both with non-energy and energy professionals, there continues to be a vision that energy is petroleum and gas, or energy is electricity or biomass products. Energy brings images at one end of the spectrum of coal mines, oil and gas fields, pipelines, big dams, power plants, and at the other end of the spectrum energy is also seen as women carrying heavy loads of fuel wood, deforested areas, dark villages at night, illuminated cities, lighted homes. More recently, energy also brings images of blackouts, electricity tariff increases, wars to gain control over hydrocarbon resources, sabotages of existing infrastructures.

All of these images have their *raison-d’etre*, but where is the human energy? Where is the human energy that goes into agricultural production, transport

of crops to the homestead, the human energy spent to fetch water, to go to the market, to school or to health clinics? Where is the link between energy and other human development issues? Is the lack of safe water which is the main cause of children mortality seen as an energy issue? Is the incidence of pulmonary diseases or premature deaths due to indoor air pollution or vehicular emissions seen as an energy issue? What is more important: the energy products, the energy infrastructure or the energy services?

At the risk of sounding naïve, my objective in bringing out all these images is to stress that unless we bring the Human Face of Energy, we will continue to err on energy policy making, on resource allocation, and project design. The primary link between energy and poverty reduction is the Human Being which needs the energy to survive, to grow, to improve its living conditions. The right to energy and to energy services should be at the core of poverty reduction and development strategies. Energy is a human right.

Changing the Face of Energy: the opportunity of the MDG Framework

Let me now explore how can we change the Face of Energy through the opportunity of the MDG Framework. First, what do the facts and figures tell us?

- 1.6 billion people still lack access to modern energy services today . By 2030, 1.4 billion people will still lack access to electricity, if current policies are not changed.
- 2.6 billion people rely on traditional biomass for cooking.
- Indoor air pollution (from cooking and heating with biomass over open stoves) is a leading cause of women, infant and child mortality in developing countries ahead of malaria and tuberculosis combined.
- Between 1970 and 1990, 831 million people in rural areas gained access to electricity.
- The poor spend up to one third of their disposable cash income -- \$10 a month – on poor quality energy services.
- From now to 2030, average investment needs are estimated to amount to 319 billion USD annually for developing and transition countries.

The challenge that we have ahead of us is therefore tremendous. Fortunately, in my view, if energy and other professionals internalize the framework provided by the Millennium Development Goal, it provides a remarkable opportunity to ensure that not only every energy sector strategy, policy

decision, or investment will contribute to poverty reduction, but also that the reduction of poverty will be gender-equitable and sustainable.

Indeed, through the MDGs, we should recognize that there is an opportunity to bring out the Human Face to energy services, as they focus on the demand from energy services from other 'sectors' and emphasize the potential benefits for women, men and children. Let us take some example:

- Energy services are needed **to reduce hunger**, and therefore to maintain human energy. 95% of the food needs to be cooked to be ingested. Without affordable heating energy for cooking, people cannot eat what they need to live healthy and productively. Some studies have shown that as fuels scarcity increases or when heating fuel prices increase, families with the most limited cash incomes will decrease the quantities of food cooked. Women will be the first ones to be affected, as they leave their share to their husband and children. Without food, people cannot live healthy and productive. Example of Mali after the 1984 drought.
- Energy services are needed **to improve health services**: lighting, power - are needed to improve safe child delivery and save mother's lives. By enabling electric lights at night, it reduces household accidents such as paraffin burns associated with other commonly used fuels.
- By powering equipment for health clinics, energy enables health clinics to refrigerate vaccines, operate medical equipment, and provide treatment in the evening.
- By allowing the use of modern tools of mass communication for health education, energy helps fighting of HIV/AIDS and other preventable diseases.
- Energy services are needed to draw safe water or boil water, and save children's lives from diarrhea.

Energy services are need **to build human capital, to provide education and training.**

- Power can free time for education. One of the main reasons for children, especially girls, being out of school is that they are asked to perform the household chores and collecting cooking fuel or fetching water is an extremely important component of the daily household chores. Example of Multi functional platforms. Girls can sleep.

- Lighting services enables evening study and classes. Electric lights in schools and homes extends the time available for children to study. An ESMAP survey of women's time use in rural India shows that the probability that a woman will read is strongly related to the presence or absence of electricity in the home.^[2] Educated adults, especially women, further ensure educated children.
- Lighting and power helps retain teachers by improving the quality of life. One of the main challenges to improve rural education is teacher's retention due poor quality of life in rural.
- Power increases access to electronic educational facilities, both for teachers and children, and to access libraries.
- Other energy- linkages include the impact of pollution, for example , switching to lead-free gasoline can reduce the incidence of lower IQ caused by lead ingestion in heavily trafficked peri-urban areas. The permanently reduced lower IQ makes it tougher for these children to complete a full course of primary education.
- Accessing modern energy to improve education will also directly contribute to women's empowerment. Research by the World Bank has shown that education for girls is the single most effective way of tackling poverty. Women with even a few years of basic education have smaller, healthier families. Each additional year of female education is thought to reduce child mortality by 5-10%.^[3]
- Energy services **are indispensable for growth**, itself indispensable to reduce poverty, in order to increase the availability of productive capital, to increase the creation and productivity of enterprises, to increase employment and incomes.
- Modern energy can free time for productive activities. By switching to more efficient modern energy, the poor can significantly save the time on biomass fuels collecting and cooking. By having access to light at night, the poor can continue productive activities beyond daylight hours.
- Modern energy enables the poor to benefit from the higher efficiencies of mechanized processes for both the farm and the non-farm activities. Powering pump sets and agro-processing machinery enables farmers to

irrigate, to add value to crops and to raise yields. Petroleum fuels and liquefied natural gas power the motorized transport that increase the speed to and from the market. Non-farm home business or SMEs can also be created or expanded through accessing to modern energy.

- Modern energy enables the poor to benefit from modern communications which help sound business decision making. Electricity provides essential input into telecommunications, including simple telephone, radio, television, and even Internet. Access to radio and television enhances information on local and national events. Reporting on weather can enhance farmer's and fishermen's ability to respond to sudden changes to reduce damages. Through telecommunication, the farmers can also order inputs, market outputs, and keep track of prices for both.
- Modern energy improves investment climate for foreign and domestic business which leads more employment. Availability of power is a significant factor in decisions regarding the start-up of a business venture. It is also an important factor to attract and retain professionals.

I could continue with many more of these linkages, but other speakers will address some of the sectoral linkages in greater detail. I would like now to move on to the second theme, which I called: A vision for a new Energy Ladder.

A vision for a new Energy Ladder: Gender Equity in Energy.

If we accept that energy is a human right as I proposed in my introduction, as energy professionals we must be concerned that the benefits from energy services on both welfare improvements in health and education for example, and from growth will be equally shared by women and men. We must also be concerned that the distortions which presently exist will be corrected, and that the results will be sustainable. This is a pretty big challenge.

70% of the poor are women. This is a fact that we cannot ignore. We also know that men and women have different perceptions of the needs and solutions for energy services. For example, we tested these gender differences in Cambodia at the household level through a participatory approach for a rural energy services projects. Men were ranking power higher – as it gives access to TV – while women ranked heating for cooking as their priority need. At the community level, women were focussing more

globally on the whole chain: energy to cultivate, produce, transport, transform, sell, – whether it is food, water, or other commodities, education, health, security, while men were more selective: mechanical or power for certain jobs, power for leisure.

How, therefore, can we ensure that women and men's voices are equally taken into account in the design of energy policies, programs and projects? I can only envision one approach: that is to build up what I call the new 'energy ladder', where we have gender equity in seven steps

- policy making: why do we have only 2 women as Ministers of Energy in Africa, and one in Latin America and the Caribbean, none in OECD countries, Asia, Europe and the Middle East?
- country and community leadership: how can we bring more women parliamentarians to head energy committees; how can we have more women state governors and mayors informed on energy solutions which could increase the development of the community?
- household decision-making: how can information be provided to households on the range of energy solutions which could improve the whole situation of the family?
- program and projects technical design: how can we ensure that there are trained women engineers, financiers, analysts involved in energy professions? Can energy learn from the water sector in this respect?
- enterprise development: how can more women become CEOs of energy enterprises – large or small?
- information and knowledge dissemination: how more women and men be involved in information and knowledge dissemination on the benefits to society of gender equity in energy services?
- Research: how can more women and men be involved in doing research that would meet the technology and other energy needs of men and women in developing countries?

I recognize the imperfection of the concept of 'energy ladder' to structure the issues which I raise. Nevertheless, this is an attempt to structure an approach and call the attention that it is indispensable to have significant involvement of women at all decision-making and technical levels, in order to bring gender equity in energy to the foreground. I think it is achievable, but will require more concerted efforts, and more resources.

This workshop is another step forward, and I look forward to the discussion.

Thank you for your attention.

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It is also taking place on the last day of the Olympic Games in Athens, an event which I always find greatly inspiring, as we see so many great athletes who have been investing so much personal time and effort to give the best of themselves individually or in teams to **achieve results**. I stress **to achieve results**, because this is indeed the challenge that we all have when working on development and poverty reduction. And I always ask myself: **are we giving our best individually and collectively, as international teams, to achieve results?**