The gender dimensions of energy policy

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When policy makers take decisions with respect to energy issues, they often do so, considering that those decisions affect women and men in the same way. This is very far from the truth. This article provides evidence of the dramatically different gender dimensions of the implications of energy policy decisions and, based on the evidence provided, advocates that it is essential that the gender dimension must be taken into consideration in all energy policy decisions.

The following five aspects of energy policy are addressed:

A. The under-representation of women as policy makers in the energy industry.

B. The effects on other sectors of the economy, when a country discovers large hydrocarbon deposits: The Dutch Disease and whether the discovery of oil or natural gas tends to perpetuate patriarchy?

C. The gender dimension of energy consumption.

D. Health issues related to the existence of energy options and how these affect women and men differently

E. Links between energy resources, under-representation and conflicts and their effects on women.

A. The under-representation of women as policy makers in the energy industry

Over the last decades, there has been a global trend for increased female empowerment, with the number of female parliamentarians growing by 5% between 1995 and 2002. However, countries such as Algeria, Russia and Kazakhstan – all of which have enjoyed a sharp rise in oil revenues – saw a fall in female representation.

According to the UNIDO, worldwide, women occupy around 19% of all ministerial jobs, but only 7% of these are in environment, natural resources and energy2. The same report mentions: 'evaluations from South Africa and Guatemala show that electrification has resulted in a 9% increase in female employment, with no comparable increase in male employment, and in Nicaragua electricity has increased the propensity of rural women to work outside the home by 23% while having no effects on male labour force participation'3

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1 Views expressed are personal. In the article, when reference is made to oil resources, it also applies to natural gas resources.
2 Sustainable Energy for All: the gender dimensions – UNIDO – UN Industrial Development Organisation and UN Women report
In addition, there is a large volume of evidence that shows that in countries where there are large natural resources there are also high levels of corruption. One such report found “that an increase in oil rents significantly increases corruption, significantly deteriorates political rights.” In general governments, spend what is collected in taxes, which makes citizens more interested and more involved in monitoring those decisions of the government. Oil and natural gas wealth tends to decouple citizens from their watchdog function of the government. In oil rich countries, government spending is primarily not coming from the taxes paid by the citizens. Citizens are therefore less interested and usually have less access to information on how much money is being raised by the royalties taxes and licensing fees and what it is spent on. Thus, oil wealth often leads to bad and corrupt governments. The list of oil/natural gas rich countries, which are governed by corrupt governments, is unfortunately too long. In corrupt and bad governments, women are often even more marginalized from policy making.

B. The Effects on Other Sectors of the Economy When a Country Discovers Large Hydrocarbon Deposits: The “Dutch Disease” and Does Petroleum Perpetuate Patriarchy?

The phenomenon of the “Dutch Disease” was first identified and described in the late 1950’s, when the Netherlands discovered very large natural gas fields. The term is used basically to describe the following mechanism: a sudden large increase in the share of revenues of a country derived from natural resources makes the nation's currency stronger, compared with currency of its competitor countries and this in turn makes products exported from the oil rich country more expensive with regard to exports from other countries, while at the same time imports into the oil-rich country become cheaper. This mechanism makes the manufacturing and the agriculture sectors of oil rich countries less competitive, causing these sectors of the economy to shrink.

The manufacturing and agriculture sectors that shrink as a result of this effect, are often the sectors where there is high female employment. Michael L. Ross, in his book “The Oil Curse: How Petroleum Wealth Shapes the Development of Nations” looks at a number of countries that are oil rich and plots the oil income per capita of these countries against the percentage of parliamentary seats which are held by women. As can be seen from the chart below the countries with the highest oil

3 Sustainable Energy for All: the gender dimensions – UNIDO – UN Industrial Development Organisation and UN Women report – page 13

4 UNIDO Study

5 http://www.transparency.org/topic/detail/oil_and_gas

6 http://www.transparency.org/topic/detail/oil_and_gas

7 The Oil Curse: How Petroleum Wealth Shapes the Development of Nations, Michael L. Ross (Princeton, 2012)
Oil is the world’s most capital-intensive industry, so it creates few jobs. However, the few jobs that are created in the energy sector, tend to be either physically heavy-labour intensive jobs which often go to men, or are highly skilled engineering jobs. Engineering jobs tend to be filled by men, because while women account for more than half of university graduates in several OECD countries, they receive only 30% of tertiary degrees granted in science and engineering fields. It should be clarified however that oil wealth does not necessarily always harm the status of women, but rather that this is what happens in most cases. Oil rich countries such as Norway, New Zealand, Australia, Uzbekistan, Turkmenistan, pre-war Syria, and Mexico have made faster progress on gender rights than other countries without oil wealth. However, it is also proven that in certain circumstances, the oil and gas wealth reduces the role of women in the workforce and their role in political influence.

Some argue that the differences in the level of female participation in the labour force in one country with respect to another can partly be explained, by the level of discrimination which is rooted in the cultural, religious and legal environment of the country. “Economic and political marginalization frequently go hand in hand: without
jobs women have less political influence, without political influence women find it harder to get jobs.”

As Michael L. Ross argues, this explanation is false or at best only partly true. Oil and gas exports can have a detrimental effect on the role of women in society, as they often lead to a decrease in the percentage of women in the labour force. Unlike manufacturing, where growth of the sector tends to draw women out of the home and into the labour market, oil wealth encourages them to stay at home, thus blocking their key pathway toward economic and political empowerment. In most countries, typically men are the main breadwinners of the family and women’s salaries contribute only marginally to the total family income. Women’s employment is often in part-time, lower wage jobs. In situations where oil wealth “pays” for some of the family’s expenses – such as some types of taxes, or education bills – then the necessity to complement the main salary of the family by a marginal additional salary disappears and the women tend not to work.

In his analysis of the role of women in oil producers and in non-oil producers from different regions in the world, Ross demonstrates that the gap is largest in the Middle East and North America – where the number of working women is about 23% lower in the oil states than in the non-oil states. Oil states also have a significantly lower number of women in government – with the difference in the Middle East being more prominent with non-oil states having more than three times more female parliamentarians than the oil producing states.

The Annex to this article gives an overview of Ross’s comparison between Algeria, Morocco and Tunisia. All three countries have the same religion (over 95% of the population being Muslim) but, while Algeria derives over half of its income from oil, Morocco and Tunisia have almost no income from oil. Female labour participation in Algeria was at 12% while in Morocco and Tunisia it was more than double (26% and 25% respectively) and the female-held parliamentary seats were 6% in Algeria and 11% and 23% respectively in Morocco and Tunisia. This analysis suggests that the level of participation of women in the work force or in parliament is inversely proportionate to the share of oil in the GDP of a country, and cannot be attributed purely to religious or cultural aspects.

C. The Gender Dimension of Energy Consumption

The nature and the level of per capita consumption of energy is vastly different between the developed and the developing world. In Europe – per capita energy consumption is predominantly used for: Heating/cooling, electricity but primarily for mobility and transport. In developing countries, energy consumption is predominantly due to the use of electricity for domestic purposes, medicine, education, etc. Gender disaggregated data for the per capita use of energy in developing countries is not readily available. In European countries, where data is available, energy use per capita is greater among men than women. For example: in Germany and Norway men consume 70-80% more energy than women; in Sweden
100%; and in Greece 350%. These dramatic differences are primarily due to the fact that the largest share of the per capita energy consumption is used for transport, particularly cars. In countries like Greece, most households would only have one car, which is typically used by the man. Women tend to work within shorter distances from the home and to use public transport more. Therefore, if a country decides to focus on creating and improving its public transport system, it will influence the per capita energy consumption of men and women differently.

As a UNIDO report states: “As access to affordable and non-polluting energy services is a prerequisite for achieving economic empowerment and poverty reduction, these inequalities limit economic opportunities for women and also have a considerable negative effects on their families and communities.”

It is for this reason that the Convention of the Elimination of All Forms of Discrimination Against Women (CEDAW) explicitly mentions that the parties to the convention should “take all appropriate measures to eliminate discrimination against women in rural areas ... particularly in relation to ... (access to) electricity and water supply, transport ...”

In April 2013, the Acting Head of UN Women, Lakshmi Puri stated “Women can and must play an active role in planning, producing, supplying and managing of energy. There can be no energy for all that is sustainable unless we tap into the energy, engagement and expertise of women.”

D. Health Issues Related to Energy and their Gender Dimension

In most developing countries women experience energy poverty more severely than men. Their role is often more associated with household activities and they are often the ones that have to spend most of their days in the time-consuming and physically difficult tasks of collecting biomass fuels. Women are thus prohibited from using their time on other activities, such as going to school or working in a wage earning activities.

At the same time cooking indoors with biomass and other fuels such as coal, charcoal, wood and dung has a particularly negative effect on the health of women and girls. It is estimated that this causes 85% of all deaths attributable to indoor air pollution, which are estimated to be about 2 million deaths per year globally. “In fact, illnesses from indoor pollution result in more deaths of women and children annually than HIV/AIDS, malaria, tuberculosis and malnutrition combined. Other important direct health impacts from dirty energy use and indoor pollution include life-long or chronic disease such as asthma; burns to children; injuries to women from carrying wood; and increased violence against women and girls because of lack of street lighting at night.”

9 http://www.sciencedirect.com/science/article/pii/S0301421509005977#
10 http://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Women_and_Youth/GU
E. Links between the Existence of Energy Resources and Conflict and their Effects on Women

Since the early 1990’s, oil producing countries have been about 50% more likely, than non-oil producing countries, to have civil wars.

Paul Collier and Anke Hoeffler have shown that if a third or more of a country’s GDP comes from the export of primary commodities, the likelihood of conflict is 22 per cent. Similar countries, that do not export commodities, have a 1 per cent chance of conflict. Therefore, there is twenty two times more chance of conflict if you are an oil or gas exporter.

We know at the same time, that fragility and conflict affect women and girls differently from men and boys. Women and girls suffer disproportionately more in violent conflicts; they suffer not only from the by-products of war but they are also often targeted as a strategy of war. Unfortunately there are many cases in the world where this has been documented.

Conclusions:

In the brief analysis given above, this paper has provided data on the role of women as policy makers in energy and the gender aspects of the energy industry, what happens to sectors of the economy when a country discovers large hydrocarbon deposits, the different profiles of men and women as consumers of energy, health issues related to energy and how the discovery of hydrocarbons greatly increases the possibility of a conflict.

In all the aspects considered above, there is evidence that there are significant differences in the way men and women are impacted. It can therefore be concluded that it is critical to consider the gender aspects of energy policy in order to take into consideration both women’s needs and capabilities and their skills and expertise. There is enough empirical evidence to say that failure to look into the gender aspects of energy policy, results in promoting patriarchy which, at the end of the day, does not make economic, social, or political sense.

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9 http://economics.ouls.ox.ac.uk/12055/1/2002-01text.pdf
Comparing Tunisia, Morocco and Algeria with respect to share of oil income per capita and the status of women

*Extracts from “The Oil Curse: How petroleum wealth shapes the development of nations” by Michael L. Ross*

Oil rich Algeria provides a telling contrast to oil poor Morocco. A naïve observer might expect to have more women in the labour force and in parliament than Morocco; Moroccans hold more conservative religious views than Algerians; Algerian incomes are considerably higher; and Algeria has had a series of socialist governments, while Morocco has been ruled by a monarchy with strong tribal roots. Yet Algeria, has fewer women in its non-agricultural labour force, fewer women in its parliament and fewer protections for gender rights than does either Morocco or Tunisia.

<table>
<thead>
<tr>
<th></th>
<th>Algeria</th>
<th>Morocco</th>
<th>Tunisia</th>
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<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Population in millions</td>
<td>31.8</td>
<td>30.1</td>
<td>9.9</td>
</tr>
<tr>
<td>Muslim population (%)</td>
<td>97%</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>Income per capita</td>
<td>$1,915</td>
<td>$1,278</td>
<td>$2,214</td>
</tr>
<tr>
<td><strong>Oil versus manufacturing</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Oil income per capita</td>
<td>$1,037</td>
<td>$ 0</td>
<td>$121</td>
</tr>
<tr>
<td>Textile/clothing exports per capita</td>
<td>$0.09</td>
<td>$94</td>
<td>$287</td>
</tr>
<tr>
<td><strong>Female Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female labour force participation %</td>
<td>12%</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>Female-held parliamentary seats %</td>
<td>6.20%</td>
<td>10.80%</td>
<td>22.80%</td>
</tr>
<tr>
<td>Gender rights index</td>
<td>2.8</td>
<td>3.1</td>
<td>3.2</td>
</tr>
</tbody>
</table>

In Morocco and Tunisia their inexpensive labour helped to develop their export oriented textile industries. By 2004, textile exports were Morocco’s main source of exports and it accounted for three quarters of the growth of female employment in the 1990’s. Tunisian textile industry followed a similar path, expanding since the 1970’s and relying on low-wage female labour. In both of these countries the gender rights movement grew as a result and this lead to reforms of the legal framework with respect to family law, inheritance, etc. In Morocco in the early 2000s it lead to an informal 20% female quota for political parties in parliament.
Oil rich Algeria however provided a stark contrast to Morocco and Tunisia in this respect: although Algerian incomes were considerably higher and despite the fact that Algeria had a series of socialist governments, nonetheless it has fewer women in non-agricultural labour force, fewer women in parliament and fewer protections for gender rights than either Morocco or Tunisia.

If Morocco and Tunisia had large oil sectors like Algeria they would probably not have become major textiles exporters, since the “Dutch Disease” would have made their labour costs too high. Without large, export oriented manufacturing sectors, women in Morocco and Tunisia would have been slower to enter the labour force, had fewer opportunities to organize and major reforms – especially in Morocco, which lacked Tunisia’s ‘enlightened leadership’ – would have been less likely.
About the author

Androulla Kaminara is Principal Advisor in DG International Cooperation and Development of the European Commission. In 2013-14, she was an Academic Visitor and in 2012-2013 the EU Fellow at St Antony's College, University of Oxford. Between 2008 and 2012, Androulla was the Head of the European Commission’s Representation in Cyprus. Previously she was the Director for Quality of Development Cooperation Operations in all third countries, Head of Unit for geographic coordination for 44 African and Caribbean countries as well as member of cabinet of two Commissioners. She has been working for the European Commission since 1991. Before joining the Commission she was a senior consultant, special adviser to two Cabinet Ministers in Greece, as well as project leader for a bank and managing director of a private consultancy firm. She holds a B.Sc. in Geology and Physics (Univ. London), Masters in Management Science (Imperial College, London) as well as Maîtrise in International Politics (ULB - Brussels).

All views expressed in this article are strictly personal.
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South East European Studies at Oxford (SEESOX) is part of the European Studies Centre at the University of Oxford. It focuses on the interdisciplinary study of the Balkans, Greece, Turkey and Cyprus. Drawing on the academic excellence of the University and an international network of associates, it conducts policy relevant research on the multifaceted transformations of the region in the 21st century. It follows closely conflict and post-conflict situations and analyses the historical and intellectual influences which have shaped perceptions and actions in the region. In Oxford’s best tradition, the SEESOX team is committed to understanding the present through the longue durée and reflecting on the future through high quality scholarship.

SEESOX has the following objectives:

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- To organise conferences, workshops and research seminars;
- To promote multi-disciplinary study of the region’s development within the University of Oxford (e.g. politics, international relations, anthropology, sociology, economics), working in collaboration with other Centres and Programmes within the University, including student societies;
- To spearhead intellectual exchanges and debate on these issues among networks of individuals and institutions beyond Oxford;
- To foster cooperation between the academic and the policy making communities.