

Gender, energy and nutrition: what goes under the pot influences what comes out of the pot
Joy Clancy
Principal Investigator, ENERGIA Gender and Energy Research Programme

Much of the research related to promoting clean cooking fuels and more efficient stoves for women in developing countries is about providing evidence of the links between health issues and indoor air pollution. However, we don't often look at how energy access affects health by its impact on what gets cooked. This was the issue I found myself addressing at a side event on *Clean Cooking Solutions for Health and Sustainability* organized by the Global Alliance on Clean Cookstoves (GACC) (<http://cleancookstoves.org>) together with the Aspen Institute (<http://www.aspeninstitute.org/>) and World Access to Modern Energy (<http://www.wame2015.org/>) on July 8th at the Milan Expo 2015 which takes as its theme: Feeding the Planet – Energy for Life (<http://www.expo2015.org/en/learn-more>).

Participating in the Milan Expo made me think outside the box in respect of gender, energy and health. The situation is far more complex than the core issues of health related to indoor air pollution. Research at CSTM has already done a lot draw attention to other issues related to fuelwood collection such as damage to spines and sexual harassment. We now have an opportunity to link up with health/nutrition experts to show how access to clean energy contributes to improved health and nutrition and how women play a key role in both dimensions.

Energy, nutrition and health

There is substantial evidence to show that it's women, supported by their daughters, who bear the burden of household energy provision which has negative consequences for their health linked to indoor air pollution and carrying heavy loads of fuelwood. We also know that collecting wood also exposes them to physical dangers and sexual harassment. We recognize that the solution to these problems includes a transition to cleaner cooking fuels and technologies. Nevertheless despite all the hard work by organisations such as ENERGIA, GACC and others to raise awareness of these issues we are currently woefully short of the 1.7 percent target growth rate required to reach universal access to non-solid cooking fuels by 2030!

What is less readily recognised is that the quantity and type of energy/fuel under the cooking pot have other health impacts to the ones we usually associate with household energy. Cooking makes food palatable and reduces the chances of infection or illness. Boiling water makes it potable and it also promotes hygiene. All these stove services can potentially influence people's health. We shouldn't forget that illness is one of the most significant factors in pushing households into poverty through the loss of income and the need to buy medicines. Evidence shows that when urban households have insufficient quantities of energy to meet their daily needs a number of coping strategies are introduced which potentially have negative health impacts such as reducing the number of meals cooked and the quantities of water boiled as well as shifting to informal sector food vendors (more about the latter below). In a survey of urban households in Philippines 22% of respondents reported changed habits as a response to increased energy prices including 1% skipping breakfast and 3.7% buying prepared food¹.

The energy/fuel under the cooking pot can affect the taste of food either positively (charcoal for roasting) and negatively (kerosene). The taste of food can be an influencing factor in the transition to clean fuels. It is one of the frequently cited barriers to moving away from wood and charcoal: food won't taste the same/as good with other fuels.

¹ J S Clancy, A Alvarez, O Maduka and F Lumampao (2006), *Enabling urban poor livelihoods policy making: understanding the role of energy services*. Synthesis report prepared for DFID KaR R8348

Energy access influences nutrition in other ways. Electricity providing refrigeration is important for storing food for longer periods, the quality deteriorates more slowly – so reducing waste and helping household budgets. Refrigerated transport allows for food distribution. Refrigeration can help overcome ‘the hungry period’ - the period in the season preceding harvesting of crops when food is scarce. The processing of staple grains and roots using modern equipment can improve food quality as well as saving women much time and physical energy.

So where are the gender issues?

Again another issue we don't see referred to very often is the stress for women to produce nutritious meals for their families which includes provision of energy and water (often with their daughters help). Improving access to modern energy can do much to relieve that stress, improve family health in multiple ways, reduce women's time burden and free-up girls to go to school. Evidence shows that men are more likely to share household tasks when they can use equipment powered by modern energy forms such as electricity. Men generally make final decisions about major family purchases – they have to be convinced a new stove or changing fuel is a priority for household budgets.

Energy, urban street food vendors, gender and nutrition

I mentioned earlier that a coping strategy for urban households when they cannot afford enough fuel to meet their household needs is to switch to using informal sector street food vendors. It is also a common source of food for men who have migrated to urban areas in search of work. So these vendors play an important role in the nutrition for urban poor which is going to increase in significance in an urbanising world.

Hygiene, linked to both the vendor and safe storage of food, is closely linked to energy access. Where food is prepared and stored is important – it can be the household or the vendor's stall site. A recent UNDP supported project in Philippines provided loans and business skills training to women informal ambient food vendors enabling them to formalise, improve hygiene and increase income and status². The vendors' health is checked, which helps prevent cross infection for example from tuberculosis. They receive a certificate which can be displayed on their stall – increasing customer confidence. The vendors are supplied with improved charcoal stoves which has meant cleaner cooking and increased customers as well as being cheaper to operate. All in all contributing to a win-win situation.

Being a street food vendor is an important livelihood for many poor people, particularly for women. Evidence shows women will use income to buy good quality food for their families³. However, we don't have a body of empirical evidence that links the two together. This means that the ENERGIA research programme could provide some of this much needed evidence to convince policy and decision makers to pay attention to this marginalised but important group for providing services to the urban poor and contribution to the health of their nations. The team leading the research theme gender and productive uses of energy has chosen to concentrate on how energy affects the informal sector food vendor enterprises in South Africa, Rwanda and Senegal (<http://energia.org/what-we-do/gender-energy-research-programme/research-area-2-productive-uses-of-energy/>).

While we are well aware of the potential positive benefits to women's livelihood activities in the food sector through access to modern energy carriers (although this still needs quantification) we have less evidence about whether or not there are any negative consequences. For example will

² J S Clancy, O Maduka and F Lumampao (2007), “Sustainable Energy Systems and Urban Poor Livelihoods”. in *Urban Energy Transition* (Elsevier)

³ Rahman Osmani, S. (2010) *Food Security, Poverty and Women: Lessons from Rural Asia*. IFAD, [Online] http://ifad.org/gender/thematic/rural/rural_2.htm (accessed 5 October 2010)

men enter the sector and displace women? There is certainly evidence from hairdressing enterprises in Africa that men move in when they have access to electricity. Many customers are men – will they switch if vendor isn't cooking with 'traditional' fuel? In what ways does access to modern energy contribute to women's empowerment?