Cooking dinner, as it turns out, is one of the most serious public health and environmental problems in the world. There's a common misperception that environmental concerns are just a First World luxury. But the cookstove example shows that the global poor, too, are in need of better, more efficient, less polluting energy sources.

Here are some key facts, courtesy of Lawrence Berkeley National Laboratory:

1. More than half of the world's population—three billion people—cooks their food indoors using open fires or rudimentary stoves.

2. Indoor burning of solid fuels releases toxic pollutants including particulate matter and carbon monoxide, which cause up to two million deaths annually.

3. Women are most adversely affected, because they do most of the cooking. They also have to carry most of the firewood, which is not only burdensome but in many places dangerous.

4. As the household members most likely to cook family meals, women and children are most affected.

And, on top of all that, use of this method of cooking causes deforestation and promote climate change — partly because of the short-term effect of black carbon, and partly because the inefficiency of the process means lots of unnecessary carbon emissions.

Teams at Berkeley Lab's cookstove project and elsewhere have worked hard to produce improved cookstoves. It is no easy engineering task to come up with a stove that is more efficient, less polluting, durable, consistent with local food preparation methods, and cheap enough for people to use in some of the world's poorest nations. But even once the design issues have been addressed, getting the improved cookstoves into widespread use is a knotty problem.

A new study from RFF sheds some light on the factors that affect adoption of electric cookers (called mitads) in Ethiopia. The study concludes that key factors include economic status, price of electricity and price of firewood (the alternative fuel). In addition, the study found that education, both of the head of household and other family members, made a real difference. So did credit availability. The education factor can't be changed quickly, but some of the other variables more easily modified. At least to my non-expert eye, the study seemed quite sophisticated in methodology, but of course we can't be sure that the findings from urban Ethiopia will generalize to (say) rural Bangladesh. But it's not surprising that

even the very poor respond to economic incentives, or that education helps people make better decisions.