



INTERVENTION 2

Better Domestic Fuel and Heating

SUMMARY

A transition to clean energy is required beyond improved stoves. The most desirable approach is to move households up the “fuel ladder,” gaining access to cleaner, and more efficient fuels to use for cooking, heating, and lighting. Depending on the local situation, the first steps typically include gas (LPG or CGN) or liquid fuels such as bioethanol. Solar lighting is becoming more common but cannot meet other household needs. This is perceived as a rural problem, but many peri-urban or poor urban areas still use charcoal or wood for heating. Street vendors are often charcoal users.

Air Quality and Health benefits: The air pollution and health benefits from switching from solid fuels to a clean-burning fuel can

be very high for the people directly (and indirectly) affected. Clean fuels have the greatest potential to bring health benefits to low-income households, as well as to promote climate co-benefits.

Carbon benefits: Nominal. Reductions in black carbon bring some benefit, but moving from burning biomass to fossil fuels in principle results in an increase in the release of carbon. The net benefit may be, therefore, only slightly beneficial.

Costs: High. Switching to a cleaner fossil fuel can be costly. The initial infrastructure (storage, pipework, burners) can impose an upfront cost, which is prohibitive for poor families, even if the running costs are manageable. Some form of subsidy to help low-income families could be justified.

Feasibility: Poor families typically do not have significant political influence and, therefore, there may be little support for the government subsidies or fuel price rises required to achieve phasing out of firewood.

Key Players: Governments, local communities, fuel suppliers

EXAMPLES

Despite decades of efforts by governments, NGOs, and academics to get households to switch to cleaner stoves and give up their traditional stoves, progress has been slow. Efforts currently focus on “cleaner cooking and heating” based on providing an alternative fuel, often bottled gas or biogas.



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LPG SUBSIDY SWITCH, INDIA. The costs of changing to LPG systems have been too high for many poor families in India. The government introduced a campaign to persuade wealthy households to forego their entitlement to some fuels subsidize and to transfer these to a program to subsidise LPG for poorer families. The program is progressing towards its initial goal of reaching 50 million households, which has been expanded to 80 million. Between 2016 and 2018 a reported nearly 40 million households took advantage of the new program. While this outreach has been very successful, many families are reported to be reducing LPG use because of cost and the government is examining how to address this.

LPG PROGRAMS. An increasing number of countries are moving to implement national LPG programs, including Cameroon and Brazil (Global LPG Partnership).

ENERGY TRANSITION, CHINA. China is ahead of most low- and middle-income countries in its energy transition: hundreds of millions of rural homes started using clean fuels such as electricity and gas in recent decades. However, recent research in China (Carter 2020) highlights the fact that even those households that have switched to cleaner fuels continue also to use their traditional coal and wood-burning stoves for cooking and space heating. Similar patterns have been seen in other countries.