



INTERVENTION 1

Cleaner Biomass or Coal Cookstoves

SUMMARY

The health impacts from cooking over biomass fires are now recognized as a major component of the global air pollution burden. The scale of the impacts, particularly on women and young children, has only recently been fully recognized. There are many versions of “improved stoves,” which can burn the same fuels much more efficiently, in some cases reducing the amount of smoke released and also requiring less fuel. Improved stoves require careful field testing and measurement to ensure effectiveness. Despite the efforts of NGOs and governments, the uptake of such methods has been very slow. This generally has been ascribed to cost, tradition, and suspicion of new technology.

It is an issue in many peri-urban areas where services have not yet been developed and in cities where outdoor, open-fire cooking is common on public streets.

Air Quality and Health benefits: Low. Cleaner or improved stoves have been shown to reduce smoke from cooking fires by half to two-thirds. While children and women in close proximity to the stoves benefit from reduced emissions, their exposure to particulate matter typically remains well above recommended levels. Upgrading cooking does not reduce the exposures from other fires in a compound, such as ones used for warmth.

Carbon benefits: None. There are not many carbon benefits from improved cleaner cookstoves because the fuel is wood or other biomass, and, therefore, reductions

in volumes used have limited overall carbon savings.

Costs: Low. The costs of upgraded stoves are small but significant to impoverished communities. Even where stoves are donated to the families, they are often used only intermittently—often alongside the old stoves. The improved stoves are not valued by the users.

Feasibility: The problems of smoky stoves were long ignored in the communities, seen either as a fact of life or a woman’s problem (and implicitly not worth the cost.) Several NGOs have been implementing programs in different cities and countries but with generally limited effectiveness. More recently, some governments have been much more supportive, but changing community attitudes is difficult.