## research highlights

## IMPROVED COOKSTOVES Product promotion promotes uptake

Proc. Natl Acad. Sci. USA https://doi.org/c7mt (2019)

The replacement of traditional cookstoves based on solid fuels with cleaner alternatives can reduce local and indoor air pollution, improving health and the local environment. However, deployment and uptake of improved cookstoves (ICS) has been slow, typically because of financial constraints, social and cultural barriers, poor supply chains and product design problems, among other reasons. Now, Subhrendu Pattanayak at Duke University and colleagues in the USA, Germany and India show how an intervention designed to tackle both the demand and supply sides of ICS can overcome barriers to adoption with high uptake rates.

The research team conducted a set of focus groups among over 100 households in 11 rural communities in the Indian Himalayas, which led to a household survey to understand preferences among the population. Insights from these two exercises informed eight small-scale pilots in three different rural settings to better understand the challenges for ICS diffusion. The researchers then implemented a twolevel intervention. First, at the community level, they acquired and transported electric and improved biomass ICS from wholesalers, provided training on sales and marketing, introduced instalment finance plans, and distributed information and training on the stoves. Second, households exposed to the first-level intervention were offered one of three random rebates at 2%, 20% or 33%. While there were no ICS sales in the control group, over 50% of households in the treatment group bought an ICS, with electric stoves proving the dominant option. Although higher rebates led to higher adoption, comparing those on low rebates to the control group showed that the supply and promotion of the ICS played an important role, with 28% of households still buying a stove despite the small rebate. Post-intervention surveys 3 and 15 months after the trial revealed reductions in daily solid-fuel use and traditional stove use that persisted over time. The results highlight the importance of demand and supply side action to promote ICS uptake.

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Published online: 11 July 2019 https://doi.org/10.1038/s41560-019-0438-7