



Sustainable dissemination of improved cookstoves: Lessons from Southeast Asia

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More than half of the population in Southeast Asia continues to depend primarily on biomass as fuel in inefficient cookstoves to meet their cooking needs. The majority of those using biomass are based in rural areas. In view of this high level of dependence on biomass, various countries in the region have launched improved cookstove dissemination programmes. In some countries in Southeast Asia, these programmes are being implemented by international NGOs in partnership with local NGOs. Such programmes have been informed by the long-term work of pioneering international NGOs like GERES in Cambodia. In other countries, multi-lateral institutions like the World Bank and European Union are working with the national governments and local NGOs to implement improved biomass cookstove programmes. Many of these programmes aim at developing an integrated approach towards the dissemination of improved cookstoves.

There is a substantial impact of cookstoves on society, and the selection of a particular cookstove has a number of environmental, health and social implications. A “systems thinking” approach is needed when looking at the issue of improved cookstoves. Instead of focusing solely on disseminating improved cookstoves, it is important to understand the entire cooking system such as the layout of the house, cooking habits, and the type of food being cooked.



On 2 December 2015, the Smart Villages Initiative and GERES brought together a diverse set of frontline actors from across Southeast Asia to consider the challenges of deploying improved cookstoves and how they may be addressed. Key conclusions and recommendations from the workshop held in Yangon, Myanmar are summarised in this brief for policymakers, development donors and agencies, and other stakeholders.

There are multiple factors that are important for the success of improved cookstove dissemination programmes. These include:

- The use of cookstoves is driven by socio-cultural factors: the adoption of improved cookstoves at the household level is not purely a technical issue. The designs of improved cookstoves and programmes to disseminate them should be tailored to local cooking habits and cognisant of other functions such as providing light and repelling insects, otherwise their adoption and sustained use will be limited.

- Across the region, most rural consumers are very cost-conscious; therefore, improved cookstoves need to be priced so that they are affordable. Furthermore, stakeholders involved in cookstove dissemination programmes should develop financing mechanisms to support the uptake of improved cookstoves. Such financing mechanisms need to be available throughout the value chain: actors at each stage need to be able to establish viable business models. If cookstoves are given for free to households there may be a lack of ownership and consequently sustained use, so well-targeted partial subsidies or financing schemes to overcome the up-front cost hurdle are preferred. Government support could also be in the form of reduced duties on the import of manufacturing machinery and materials that are not available locally.

- Most of the traditional cookstoves across the region, especially in rural areas, are produced either by households themselves or by artisanal producers. There are concerns regarding the quality of these cookstoves and their efficiency. Programmes aimed at developing the improved cookstoves value chain should provide technical support and training to producers to help improve product quality. Ensuring uniform quality of the product is likely to have a positive impact on the uptake of improved cookstoves.
- Local cookstove manufacturers must be provided with managerial support in order to develop their expertise as many of them do not have the managerial capability to develop systems that can support the growth of successful enterprises.
- Households lack awareness of the benefits of adopting improved cookstoves, so governments and donors should continue to invest in public awareness projects so that households understand the health, environmental, and social benefits of using improved cookstoves. More research is needed to build a body of evidence about the positive effects of improved cookstove adoption, requiring collaborative projects between academia and other stakeholders.
- While there has been progress in developing standards and testing facilities for cookstoves, more needs to be done. Such standards are necessary to ensure the quality of products so that consumers have an idea of the performance of the products that they buy. These standards would also help to ensure that there is evidence of their benefits to present to local and international stakeholders, not least to support access to carbon credits and results-based financing. Testing methodologies need to recognise potential differences between performance in the laboratory and the home and that the quality of manufactured products may deteriorate over time, requiring repeat testing and accreditation.
- In many cases, improved cookstove dissemination programmes are not targeted primarily at women, who have the main responsibility for cooking within the household and are most at risk of indoor air pollution. While this is changing, more needs to be done to ensure that women are targeted to ensure sustained adoption of improved cookstoves. Women's voices should be brought to the fore, and women's groups and unions can play a key role.
- Sustained and long-term support is required to develop local stove-building expertise. This support has to be provided in improving technical as well as the managerial capacity of local producers. Support also needs to be provided to actors across the value chain, like wholesalers and retailers, to incentivise them to stock improved cookstoves and promote their use by consumers. The importance of using informal social networks to do so is also extremely important.

Notes

We aim to provide policymakers, donors, and development agencies concerned with rural energy access with new insights on the real barriers to energy access in villages in developing countries—technological, financial and political—and how they can be overcome. We have chosen to focus on remote off-grid villages, where local solutions (home- or institution-based systems and mini-grids) are both more realistic and cheaper than national grid extension. Our concern is to ensure that energy access results in development and the creation of 'smart villages' in which many of the benefits of life in modern societies are available to rural communities.

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