



In many parts of the world, cooking over an open fire remains common | Photo source [Timothy Meinberg / Unsplash](#)

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SIMPLE COOKSTOVE DESIGN IMPROVES COMMUNITY HEALTH AND REDUCES POLLUTION

 ARCHITECTURE & DESIGN

The mud and lime-plaster stove uses agricultural waste as fuel

Spotted: Renowned architect Yasmeen Lari has designed a cookstove to replace the practice of cooking over an open fire. Having closed her practice in 2000, Pakistan's first female architect has since focused her work on ecologically-friendly designs for social improvement. Her 'Pakistan Chulah Cookstove' replaces the wood-burning open fires commonly found among the world's poorest communities.

Built with local mud and lime plaster, the stove includes a raised platform that provides eating, cooking and storage space. It also encloses the flame for healthier home atmospheres. A hand washing area, chimney and air regulation pipe help to keep the cooking area tidy. Lari encourages owners of the stove to power it with local agricultural waste such as sawdust bricks and cow dung.

By reducing reliance on firewood, extensive use of the stoves helps protect local forests and improve air quality for the families within the community. Covering the flames also helps reduce cooking-related injuries, and the raised platform provides a focal point for the home. Many owners decorate the back of their stoves for fully personalised works of art.

From [orange waste](#) being used for electricity in Seville, to processing [bio waste](#) used for compost or cooking gas in Côte d'Ivoire, using agriculture waste for fuel is growing in popularity. This comes as processing becomes more efficient and distribution networks and general interest grows.

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Takeaway:

In September 2021, the World Health Organization (WHO) reported nearly four million premature deaths attributable to poor air quality from cooking with polluting stoves and open fires. With 2.6 billion people regularly cooking in this way, the global healthcare costs are immense. Children with pneumonia miss school, and long-term exposure increases additional health risks in adults. The WHO's latest Air Quality Guidelines provide a framework for bringing national air quality to the recommended levels for healthy communities. Innovators working to make clean air accessible to all are playing an important part in making local solutions available more quickly.