

Introduction

Research conducted by Care of Creation Kenya (CCK) among women in Kijabe, Kenya concluded that using inefficient and open cookstoves resulted in adverse health effects for the entire family, safety hazards while cooking in the kitchen and while collecting firewood, strained familial relationships, and a lack of time to fulfill other social obligations. The **fireless cooker** proved to be an **effective, simple, and affordable tool** for addressing these and other issues that often accompany those living in poverty.

A **fireless cooker** goes by many names including hay box, straw box, insulation cooker, and retained-heat cooker. It is a simple technology that utilizes the heat of the food being cooked to complete the cooking process or keep food warm. The fireless cooker can be insulated by **cheap, local materials** such as banana leaves, old clothes, grass, straw, agricultural waste, or a more expensive recycled polystyrene material.



A woman with her new fireless cooker that she constructed herself through CCK's Fireless Cooker program.

Methods

Using informal, in-depth interviews and focus groups, research was conducted on fuel-use patterns, cooking methods, and the adoption of the fireless cookers among Kenyan households in Kijabe. Women across six communities in Kijabe were interviewed, 50 of whom had already participated in CCK's fireless cooker program, and 55 of whom had neither participated in CCK's program nor possessed a fireless cooker of their own. The surveys conducted among the two groups were identical, except for an additional set of questions pertaining to the fireless cooker that were posed to the women who had been using one. Some sample questions from the survey include:

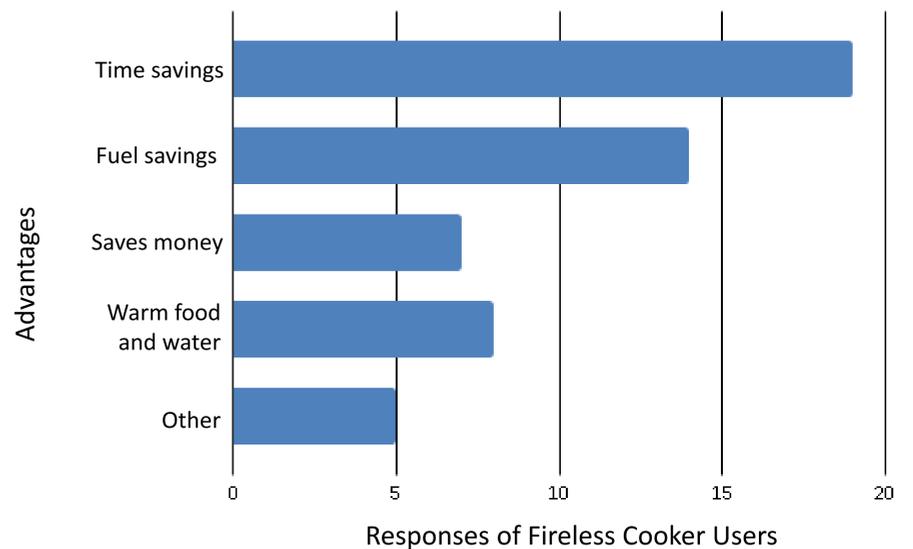
- "As a result of using the fireless cooker, do you notice having less, more, or the same amount of **time** to do non-cooking related activities?"
- "Has using the fireless cooker impacted other areas of your life? Explain."

Beyond the economic and health-related benefits of the fireless cooker, this research evaluated how a fireless cooker effected **social, environmental, and spiritual** dynamics within a household by asking questions such as:

- "Do you think the way we cook our food affects the environment? (Explain)"
- "Has your use of the fireless cooker influenced your relationship with God?"

Results

Most Important Advantage of the Fireless Cooker



Of the many reported benefits of the fireless cooker, **time savings, fuels savings, and financial savings** were reported as the greatest advantages.

Using the fireless cookers **generated extra time** for women by reducing the amount of time needed to collect fuel and by reducing the amount of time required to monitor the food while cooking. Of women surveyed, 76% reported using extra time to complete household chores, and 50% reported spending more time in their farms/gardens.

By reducing fuel consumption, the fireless cooker **saves women money**, increasing their disposable income. Of women surveyed, 24% used extra income for their children's school fees, while 22% of the women used it to buy food for their families.

In terms of **social benefits**, women discussed how using the fireless cooker enabled them to safely provide their family with warm food, organize and plan their meals well, and spend more quality time together with their family. Many women mentioned ways in which the fireless cooker benefited their spiritual lives as well.

"The FC has helped A LOT. I go to church early, I can attend fellowships instead of collecting wood, and I'm able to read the Bible more often."

Lastly, the fireless cooker allows women to be better **stewards of the environment** by reducing their use of fuel and water, and reducing air pollution within their homes.

"May God bless the one who had the idea for the fireless cooker. We had problems with wood and charcoal before, so the FC has been helping a lot."

Conclusions

The fireless cooker acts as a **holistic poverty alleviation tool** by helping to mend physical, social, environmental, and spiritual brokenness that often manifests itself in the lives of those living in poverty.