

IMPACT REPORT

BURN DESIGN LAB 2022





WHO WE ARE

Burn Design Lab is a diverse, collaborative team that includes both recently graduated and tenured engineers, field staff with lifelong experience in Africa, and volunteers bringing a wealth of expertise. Our knowledge of regional cookstove alternatives speeds the identification of design objectives needed for significant performance improvement over the status quo, and in-house lab testing provides performance data for quick validation of design changes. BDL is recognized by the Clean Cooking Alliance as a Regional Testing and Knowledge Center of cookstove testing and research.

WHAT WE'VE DONE

2022 BY-THE-NUMBERS

- 4** Countries: Ghana, Kenya, Uganda, Sierra Leone
- 8** Staff
- 10** Volunteers
- 2** Field Staff: Ghana
- 3325** Volunteer hours
- 186** Tests completed
- 26** Field Tests
- 282** Hours testing in the lab



LIFETIME IMPACT SINCE 2010

- 2.5+ MILLION** Stoves
- 15+ MILLION** Lives Impacted
- 6+ MILLION** Tons of Wood Saved
- 12+ MILLION** Tons of CO2 Reduced
- 1,000+** Jobs Created
- \$520+ MILLION** Household Savings



WHERE WE'RE GOING

- BY 2027...** **25 MILLION** Households impacted
- 1.5 GIGATONS** CO2 Reduced

2022 PROGRAM SERVICES

IMPROVED SHEA NUT ROASTER | GHANA

6 Months of roaster operation

10 full size pre-production roasters were built in Ghana and placed into operation at 6 different women's shea butter cooperatives.

22 Thousand KGs of butter produced

The new roaster will benefit 1000s of women in Ghana and West Africa, for whom making hand-crafted shea butter is their livelihood.



UGANDA | ILF FACTORY IMPROVEMENT

Project driven by Human-Centered Design
4 new tools and equipment installed and commissioned.

The improvements are aimed at improving product quality and tripling factory production capability to 15,000 stoves per month.

3X Goal increase in production numbers

35 Days in the field

WEST AFRICA STOVE DESIGN | GHANA

250 Million people using wood for cooking in West Africa

BDL worked under contract from Burn Manufacturing on the testing and development of a modified Kuniokoa stove which will be better suited to the cultural and cooking conditions of West Africa.

2022 UPDATES

NEW LAB COMPLETE!

The new cookstove testing laboratory was completed on the mezzanine level over the new shop space that BDL now owns thanks to Tom, Melissa, and Lauren Bangasser. Major contributors to the new Lab were: Randy & Debbie Johnson, The Sitchin Foundation, Bruce Campbell, and Anne & Zoli Borbely. This allows us to conduct precise testing of prototypes for cookstoves, shea roasters, and institutional (i.e. school) stoves (more about that later!)

JIKOKOA & KUNIOKOA UPDATES

In 2022, BURN Manufacturing sold 1,454,088 combined units of the Jikokoa, Jikokoa XTRA, and Kuniokoa stoves, which were developed in partnership with BDL. Since 2013, these stoves have sold a combined total of 2,722,561 units! Thank you to our incredible donors who made this accomplishment possible!

2022 FINANCIALS TOTAL INCOME - \$430,775 TOTAL EXPENSES - \$462,830

A woman wearing a purple headwrap and a grey t-shirt is carrying a baby on her back. The baby is wearing a green and yellow striped shirt. The background is a blurred outdoor setting with greenery and a dirt path.

ACKNOWLEDGEMENTS

Supporters

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The Lemelson Foundation
Meadow Creature
Baraka Impact
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The Sitchin Foundation
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Meal-a-Day
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International Lifeline Fund
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University of Dayton

The Savannah Fruits Company
Burn Manufacturing
Washington State University
Hands for Peacemaking Foundation
Berkeley Air Monitoring Group

Volunteers

Lou Fezio
Brad Johnson
Bryan Willman
Max Slade
Ricardo Sitchin
Charlie Sellers
Allan Walsh
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