

www.instove.org

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#### **Our Mission:**

We are a humanitarian not-for-profit organization, dedicated to mass producing high quality cookstoves for people most in need.



We designed our stoves for refugee camps, schools, orphanages, and hospitals and clinics in the developing world.



## Design Considerations:

We set out to mass produce stoves that are fuel efficient, portable, safe for the cooks, durable, and cost-effective.



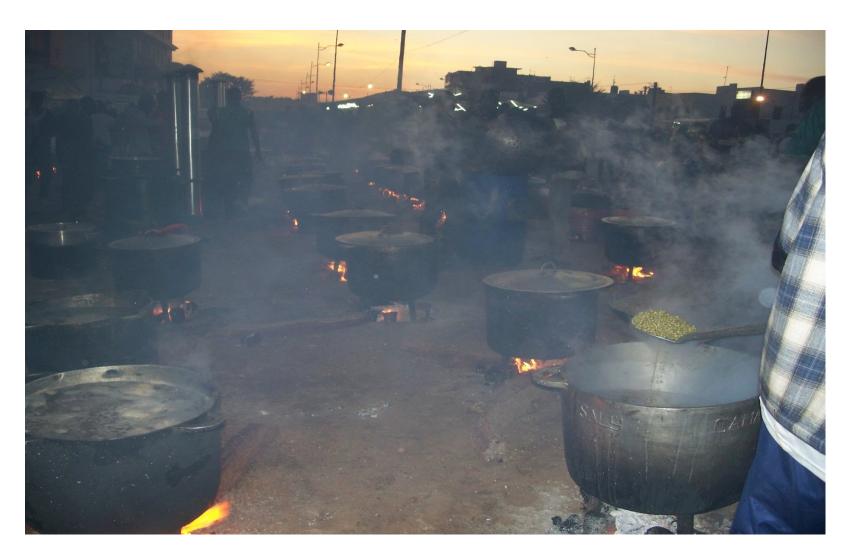
# Intake center kitchen: Dolo Ado Refugee Camp, Ethiopia. On the Somali border A typical refugee camp kitchen – this one uses a huge truckload of fuelwood every day



Field conditions for institutional cooks are deplorable. Cooks sometimes spend 11 hours a day breathing smoke like this.



## We've been in a dozen refugee camps and many other institutional kitchens. Conditions are universally dismal.



And we cannot help but be moved to action by the plight of poor women, particularly refugees.



This is our vision: cooks in smoke-free environments, using stoves that are safe to touch when in operation...



This cook told us: "With the new stoves, it doesn't hurt to breathe, my eyes don't burn, my back doesn't hurt from bending

over the fire, and my baby has quit crying"



## Stoves have got to fit local cooking traditions. This is an indigenous Senegalese rice cooker on our 100 Liter Stove...



...and frying bean cakes in Bida, Nigeria.

At the end of the day, the cooks have got to love the stoves.



We've developed secondary technologies harnessing the firepower of our stoves to meet other needs we've found in the field....

Autoclaves for hospital sterilization procedures...

A briquette system engineered for our stoves....

And a drinking water purifier.

## This hospital-grade autoclave will run a sterilizing cycle in our 60 Liter Stove using about 800 grams of fuel...



#### Our briquette press is robust and easy to use....



...and makes stick-shaped briquettes engineered for our stoves.

We have been able to effectively replace up to

80% of wood fuel with briquettes.



Our water pasteurizer uses a bicycle-powered pump to lift water to the gravity-fed system which kills all disease-causing organisms in drinking water....



...using a heat exchanger for maximum efficiency. Using the 100 Liter Stove, our prototype is producing 75-100 gallons per hour using small amounts of firewood or briquettes.



#### **Our History**

2005 -2006: Basic Stove Design Complete

2007-2009: Fine-tune design and develop

production methodology

2010: Begin Pilot Projects

2011: Major installations WFP Darfur, UNHCR

Ethiopia

2012: Continue Pilots: Stoves now in 20 countries

Incorporated organization as "InStove"

2013: First factory (Nigeria) expanded strategic

partnerships. Major installation with WFP South

Sudan. Pasteurizer, briquette maker to field trials

### **Production Strategies**



## We build and stockpile finished stoves in our Oregon facilities or

We supply parts, tools, and technical support for in-country "Stove Factory-in-a-Box" production.

- Both methods produce the same high quality stoves
- Precision construction to 1 millimeter tolerances
- Mass production requires consistent parts and supplies
- On-going relationships with producers central to quality assurance
- Multi-agency participation very important
- Collaboration, collaboration

#### Custom jigs force precision construction





Parts headed to our Nigerian partners who expect to make 2500 stoves in the first year.



#### Field Installations

200 stoves in Darfur schools 60 stoves in Ethiopia refugee camps 50 in South Sudan 20 stoves in Haiti 6 in Senegal, 6 in Cameroon, 12 in Uganda 3 in Kenya 430 being built now, with 2000+ forecast next 12 months in Nigeria New 2013 initiatives in DRC, Zambia, Mozambique, Zimbabwe







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SOLUTIONS

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