

Honduras Micro-Enterprise Stove Project

Improving Indoor Air Quality in Honduras
– A Market Based Pilot Project for
Increasing Use of Safer Cook stoves



A Collaborative Project of :

- Trees, Water & People
- Aprovecho Research Center
- The Honduran Association for Development (AHDESA)
- University of Illinois – Urbana-Champaign
- Iowa State University
- UC Berkeley
- Colorado State University
- Catholic University - Tegucigalpa



Funded by

- United States Environmental Protection Agency's Partnership for Clean Indoor Air
- Rotary Clubs and Rotary International
- Weyerhaeuser Family Foundation
- Trees, Water & People



Project Goals

- Raising consciousness of the Honduran people of the dangers of indoor air pollution
- Design and build clean & affordable cook stoves for Honduran families
- Create stove building micro-enterprises
- Reduce indoor air pollution
- Improve the health of women and children
- Reduce deforestation for fuel wood
- Provide economic relief to low income families
- Study emissions of traditional stoves versus our improved stoves



Project Objectives

- Develop three stoves for the Honduran market
- Select and train 4 craftspeople (metal shops and brick makers) to produce the improved stoves
- Select and train 26 vendors to sell cook stoves in public markets, bus stations, and shops
- Provide funding to build and sell 720 stoves
- Assist with marketing of stoves through training of producers and vendors
- Promote stoves via radio, printed materials, fairs, and training workshops
- Take emissions data in 50 homes



Anticipated Outcomes

- 3 Stove Designs at Varying Prices
- 720 stoves built and sold
- 3600 Project Beneficiaries
- 90% reduction in exposure to toxic gases with Super Rocket and EcoStove
- 50% reduction with Rocket Stove
- 50 – 70% reduction in fuel wood use



Activities to Date

Emissions Study

Dr. Tami Bond and Chris Roden of University of Illinois start emissions study – July 2004

- 1) Purchase and assemble emissions cart in Tegucigalpa
- 2) Train AHDESA staff and Catholic University students to take emissions measurements
- 3) Take data in 24 houses
- 4) Preliminary Analysis of data



Stove R & D

- Aprovecho Stove Consultants Design Rocket and Super Rocket Stoves
- Select Spanish Names for Stoves:
 - Rocket – *EcoLena*
 - Super Rocket – *EcoBarril*
 - Metal *Justa* - *EcoFogon*



Rocket Stoves – EcoLena



Super Rocket - EcoBarril



Stove Demonstration at Public Market



Farmer's Market - Tegucigalpa



Stove Demo

EcoStove



Rocket Stoves



Stove Producers

- Ricardo Cruz –
EcoStove
- FUHRIL
- AHDESA
EcoBarril and Rocket
- Pedro Franco
Ceramic Rocket



This Year's Activities

- Train Stove Producers
- Start Production of 720 Stoves
- Select and Train Vendors
- Start Marketing of Stoves
- Continue Testing Stove Emissions – UIUC
- Begin Health Study - CSU
- Continue Improving Stoves – R & D
- Test and perfect self-insulating bricks

