

Zamorano University, Honduras

Phase III: Certification and Standardization of Stoves

This project follows up on work that Zamorano completed with TPW Energy Collaborative funding in 2008 and 2009 with the aim of identifying the most effective and desirable stove for a specific and economic context. Project work included building a stove testing center on campus, receiving training from Aprovecho on how to evaluate stoves and purchasing evaluation equipment, testing the 7 most commonly used stoves in the campus testing units, identifying homes for field tests, and then building and testing 7 stoves in houses in the field.

To continue this work, Zamorano will focus on more specific information gathering and based on those results, create a certification standard for stove design certification in the area. Specific objectives include:

- Evaluating the effect of fuel wood moisture content on the heating efficiency and pollution production (indoor and outdoor) of three improved stoves using the most common types of fuel in the region.
- Applying a modified KPT (kitchen performance test) procedure to more accurately measure the actual efficiency and pollution production within seven households at Yeguaré Valley throughout the year.
- Enhancing the certification standard to incorporate stove design specifications, and construction materials.
- Developing a protocol for a social compatibility seal based on experiences of three improved stoves utilizing the stoves cooking performance, design, user perceptions and local dietary preferences.



Using pollution meters to test stove emissions

Much of the work in this continued project is following up on results from 2008 and 2009: that wood types/moisture contents need to be tested, the need for better data on which stove is better to cook which food, and how differences in construction methods affect results. This work will also hold a national conference with APROVECHO to publicize results and highlight the importance of standards.

This project is important not only in that it continues work done on stove testing using local stoves, but that the results can provide Honduran stove users, NGOs, and Central American Governments with tools to help them select the most appropriate stoves for the most appropriate uses/projects. The ultimate goal of this initiative is to have an internationally recognized Improved Stove Certification Center based at Zamorano University, and to become the Regional Evaluation Center for Latin America.

