

StoveTeam International

www.stoveteam.org

2008-2009 Annual Report

Mission Statement

StoveTeam International is working to solve medical and ecological problems by bringing fuel-efficient cooking stoves to the people of Latin America.

Scope of our work

In Latin America, millions of households are using either open fires or inefficient stoves to prepare food. The open fires are unsafe for women and children and smolder all day. Inefficient, non-vented and non-insulated cement block stoves produce smoke and use large quantities of wood.



Resulting medical and ecological problems due to the use of such cooking methods include:

- Chronic bronchial illnesses, especially for women and children who spend most of their time in smoke-filled homes;
- Debilitating scars resulting when children who fall in the open fires do not receive medical treatment;
- Increased incidence of eye problems such as *pterygium*, a condition often exacerbated by constant exposure to smoke;
- Exposure to creosote, the result of incomplete combustion in the open fires, which coats the insides of homes and hangs in long strings from interior roof supports;



- High incidence of hernias and back and neck problems among both adults and children who carry up to 100 pounds of fuel wood a day on their backs and heads;



- Increasing deforestation as villagers seek fuel wood deeper in forested areas;
- Continuing threats of mudslides and floods as steep mountain slopes are deforested.

2009 Intentions

In 2009, StoveTeam International intended to replace stoves in the homes of the indigenous with fuel-efficient stoves by:

- A. Identifying communities where we can establish a manufacturing facility for local fabrication of this stove;
- B. Providing seed money for factory start-ups;
- C. Working with various NGOs to assist in distribution of the stoves;
- D. Recruiting and training volunteers to build sustainable factories to produce fuel-efficient stoves in the field, and to provide specialized assistance with operations in the US.

Outcomes

The goals for the 2009 have been accomplished, but the work of StoveTeam International continues in all these areas.

- A. *Complete and on-going: Identifying communities where we can establish a manufacturing facility for local fabrication of the Ecocina*

In addition to our successful stove factory in El Salvador, we identified two locations in Honduras (Choluteca and Copan Ruinas) and one in Nicaragua (Leon) and one in Guatemala (San Antonio Aguas Calientes) and factories are in various states of planning and production.



Our experience in the factory startup in El Salvador has been a model for development of new sites. The factory owner in El Salvador gives demonstrations at his factory site for potential new factory owners. This hands-on training for additional startups helps insure successful operations.



The operations at Choluteca and San Antonio Aguas Calientes are producing and distributing stoves. We continue to receive requests from communities all over the world for assistance with factory startups. Requests for stoves produced in El Salvador have been received from Mexico and are being shipped.

- B. *Complete and on-going: Providing seed money for factory start-ups*
StoveTeam International's goal is to assist in factory setup with seed money, technical assistance and volunteer help in site preparation.



The final success of a factory producing the Ecocina stove at a reasonable price with the employment of local labor depends on our providing money for tools, equipment, stove molds and the first run of production. Our website provides free information on requirements for a factory, budgets and helpful hints for potential factory operators. This year we were able to provide seed money for operations in San Antonio Aguas Calientes, Guatemala and Choluteca, Honduras. We will be able to provide seed money for Leon, Nicaragua and Copan Ruinas, Honduras, within the next few months.

- C. *Complete and on-going: Working with various NGOs for the distribution of stoves*
StoveTeam actively collaborates with local NGOs in identifying communities where a sustainable factory may be located and in distributing the stoves.



Peace Corps Volunteers have been especially important in this endeavor. Their knowledge of the local conditions is invaluable and their desire to help improve the health of villagers is a big incentive to help with distribution of the stoves. In Choluteca, we work with INCATEC, a non-profit technical school. In

San Antonio Aguas Calientes we worked with Cocode Ukux Juyu, a Mayan organization that is working to save the endangered rainforest. ADESCOs have aided us in identifying communities in need of stoves. Publicity in local newspapers and television has increased awareness of the Ecocina project.

D. Complete and on-going: Recruiting and training volunteers to build sustainable factories to produce fuel-efficient stoves

A team of 16 volunteers spent 8 days in San Antonio Aguas Calientes in November 2009. Their goal was to prepare the site for the production of the Ecocina under the leadership of local factory owner Marco Tulio Guerra.



A small team went in October 2009 to Guatemala, El Salvador and Nicaragua to establish legal relationships in those areas and to register the names and design of the Ecocina. In spring 2009, the volunteer mold designers spent several weeks in El Salvador and Guatemala, perfecting the new cement stove molds. A team will return in February 2010 for more work in establishing new factory locations. We are also recruiting volunteers for year-round activities in the US, including legal specialties, public relations and database management.

Number of families directly impacted by StoveTeam.

This year we expected to distribute around 4,000 stoves, but in fact distributed over 8,000 stoves. Each stove is given to a single family, and the average family size is approximately eight people, including 5 to 7 children (a total of approximately 48,000 children). In addition, we have provided employment for individuals in each of three factories. The factory in El Salvador employs 15 people; the factory in Guatemala, 5 people; the factory in Honduras, 10 people.



How lives were changed by our work.

The installation of efficient and smoke-free stoves improves the quality of air in homes where women and children spend much of their day. The new Ecocina stove is portable, so not only is smoke reduced inside the homes, but also women can take the stove outside on sunny days and cook in the open air. A reduction in the time needed for gathering fuel wood resulted in time for other activities, and, as the stove is portable,



women often take the stove to the side of the road and make and sell tortillas, fried yucca or candies. A smoke-free environment promotes better respiratory health.



Smoke can be deadly, especially to young children. In 2003, respiratory infections, brought about largely from exposure to the smoke of indoor wood-burning stoves or open fires, were responsible for 22.6 percent of the deaths of children under the age of five. The death rate was reduced from 30.7 percent in 1999, according to the Pan American Health Organization, but remains too high.



Mariela is the five-year-old daughter of Santos Flores and Yamilet Pérez. Mariela had been suffering from asthma for several years when her family received an Ecocina two years ago. Her father reports that he used to take her to the hospital twice per week, and now it's necessary only once every one or two months. You can see an interview with her family at: <http://www.youtube.com/watch?v=7GfBZF-t26g>.



A local Peace Corps Volunteer said to a new recruit, “You are going to love this project. It’s the only project I have seen where there has not been one complaint.”

StoveTeam's biggest success in 2009

In Guatemala, without doubt the most successful part of our project is the establishment of a strong relationship with the local Maya community. Their acceptance of the Ecocina has been rewarding for us all. They came together as a community to raise money to purchase the stoves. The adoption of the Ecocina represents a major change in the lives of the community. The culture of food preparation over an open fire is long established, especially in the higher altitudes where it is cold. Searching for fuel wood was a major part of the daily life of women and children. Women of the community recognized that their health and the health of their children would be improved with the use of the stove. It may seem like a simple thing, to change the way food is prepared, but for rural communities, the use of the Ecocina has subtle impacts as well as very obvious changes in the lives of women and children. Families are able to devise alternate ways of earning money, from the use of the stove to sell prepared food, to the development of cottage industries with the time available because it is no longer necessary to spend so many hours every day in search of fuel wood.



Those of us at StoveTeam International never dreamed that such a simple concept could spread so far and so fast. We began in Guatemala working with another organization but soon realized we could do more. We designed our own Ecocina stove that costs less than 1/3 of the price of the old stove, needs no chimney or installation, and is widely accepted. We owe this to the volunteer efforts of two of the most talented stove designers in the world. There was so much enthusiasm for this project that we realized within the first week in El Salvador late in 2007 that we had a chance to not only change individual lives, but to change the world. It was heady stuff, but we have formed our own NGO have taken the concept of local ownership to Guatemala, Honduras and Nicaragua.

What didn't work this year?

We are feeling confident that we are able to solve the problems that are inevitable in working in rural Latin America. We didn't have any part of the project that failed to meet our expectations.

All our volunteers are precious to us, and we have learned that we must manage volunteer activities for maximum satisfaction on the part of the volunteers, and as well as maximum accomplishment of the goals of the factory owners. We have modified our original plan of operating factories for production of stoves, to focus on supporting sustainable factories operated by local entrepreneurs. We need to continue to offer our

volunteers meaningful work at the factory site as well as significant interactions with villagers in demonstrating the use of the Ecocina.

How the funding has influenced future operations

Having adequate funding permits StoveTeam International to take advantage of other opportunities for both new factories and community assistance. For example, in addition to establishing new factories, we were able to launch a small project in a Maya village with the collaboration of volunteer dentists from the US and El Salvador.

Other grants received as a result of foundation support

The credibility for StoveTeam International is enhanced by quality grants such as those from Synchronicity Foundation and The Milagro Foundation.

Rotary International has assisted with matching funding for the El Salvador, Guatemala, Nicaragua and Honduras projects, and local representatives of Habitat for Humanity and The Peace Corps are assisting with distribution of stoves.

In addition, the Founder/Director of StoveTeam International has given presentations at both ETHOS (an organization of engineers in technology for the developing world) and the EPA Partnership for Clean Indoor Air meetings in 2009.

Current Grant and Foundation Funding

StoveTeam International has received funding from Synchronicity Foundation, Milagro Foundation, The Singer Foundation, The Sanford Foundation and many private donors and has been supported by more than 50 Rotary Clubs in its efforts to multiply the effects of donations received.

Rotary Major Matching Grants have been used to fund factory start-ups in El Salvador, Guatemala, Honduras and Nicaragua.

Board Roster

January 2009

Nancy Hughes – President and Chair

Gerald Reicher – Vice President

Don Steely – Technical Director

Gail Norris – Volunteer Coordinator

Scott Wilber – C.P.A.

Marga Larson – Financial Advisor



Susie Hanner – Advisory Board Director and Grant Writer

StoveTeam Staff Profiles

Nancy Hughes, President, directs the work of StoveTeam International and is the founder and the face of the organization. She represents StoveTeam at ETHOS and the Environmental Protection Agency's Partnership for Clean Indoor Air. She began StoveTeam after working with a medical team and observing the results of burns and upper respiratory diseases caused by cooking over open campfires inside unventilated homes. She is an inspiring speaker and raises money for the organization. She is a graduate of Whitman College, an active member of Rotary and has been a tireless volunteer with many organizations. She traveled to Central America seven times in 2009.

Gerald Reicher, Vice President, is a Rotarian who assists factory owners by providing appropriate business tools. On the first team, he assisted with developing the concept of creating sustainable businesses rather than simply distributing stoves. Prior to his volunteer work with StoveTeam International he owned and operated a software business and was on the faculty of The University of Oregon in the Department of Cognitive Psychology. He traveled six times to Central America in 2009.

Don Steely, Technical Director, assists with stove design and the physical development of new factories. He advises factory owners about the purchase of appropriate tools and efficient factory set-up. He has built his own homes and is the "hands-on" arm of StoveTeam. After traveling to El Salvador he started a second non-profit agency to bring donated medical and computer equipment into the country. He was a volunteer election observer in El Salvador and traveled to Central America eight times in 2009. In private life he is a Rotarian and works as an educational curriculum designer and program evaluator.

Gail Norris, Volunteer Coordinator, plans and directs teams of volunteers who assist new factory owners with factory construction. She works half time for the Oregon Bach Festival as their volunteer coordinator and is also a substitute teacher. Gail has successfully planned the executive trips as well as larger volunteer trips. She is the retired owner of a travel agency and is a member of Rotary.

Scott Wilber, C.P.A., works full-time as a certified public accountant and volunteers his time as an accountant and financial advisor for StoveTeam and other non-profit organizations in Oregon. He is a member of Rotary.

Marga Larson, C.P.A., works full-time as a certified public accountant and is a financial advisor to StoveTeam International. She is a Rotarian.

Susie Hanner, Advisory Board Director and Grant Writer, is a retired author of reading programs and an active Rotarian. She has successfully written and edited all of the Rotary Matching Grants that have more than doubled the contributions received by StoveTeam International.

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StoveTeam International Story in Images

