## Four years after the Earthquake: The Need for Solar Cookers in Haiti \$8 Million USAID LPG/Improved Stove Project Has Little Impact on Charcoal Use



José Andrés, Celebrity Chef and Culinary Ambassador of the Global Alliance for Clean Cookstoves, teaches Haitians how to use a pressure cooker with a parabolic solar cooker. Photo courtesy of World Central Kitchen, 2013

In the weeks following the January 2010 earthquake in Haiti, SCI began raising funds from its supporters and strategizing with members of the Solar Cookers International Network (SCInet) to help people in that devastated, fuel-starved country. [Note: Solar cookers have been used for many years in Haiti on a small scale, funded by individual donations.] In a nation as sunny and as deforested as Haiti, more solar cookers and retained-heat cookers (as part of an integrated cooking system) were desperately needed.

Soon after the earthquake, Washington, D.C., celebrity chef José Andrés, and SCInet member Manolo Vilches of Alsol Tecnologias Solares in Spain, shipped several parabolic solar cookers to Haiti, and the two men began teaching Haitians how to cook with their most abundant source of energy— the sun.

When actor Sean Penn convinced several Hollywood actors to go to Haiti, one of his volunteers, Maria Bello sought information on solar cookers for the camp where she was working. **Bello said she was concerned about the fire hazard posed by charcoal stoves being used near the tents.** She eventually connected with Paul Munson, who had just arrived in Haiti with a shipment of Sun Ovens.

With the generous support of its donors, SCI sent a trainer to Haiti with several hundred CooKits. The German NGO GloboSol sent a volunteer to teach Haitian metal workers how to construct two Scheffler parabolic solar cooking systems (that allow indoor solar cooking) for a school and an orphanage.

In Washington, D.C., Dar Curtis, founder of Solar Household Energy, along with other solar cooking advocates, urged the international aide community including USAID, the Women's Commission on Fuel and Firewood and the U.S. Department of State to introduce solar cookers and retained-heat cookers into Haiti to reduce the need for charcoal. The solar cooker advocacy team in Washington, D.C. received a single response—and it was negative— from a USAID development expert who said he would not recommend solar thermal cooking technology for Haiti, because: "The limitations [of solar cookers] have precluded wide-scale adoption over many years of design."

**Note:** A 245-page study on solar cookers in Haiti, conducted by USAID in 1977 recommended the introduction of solar cooking technology in that country. It is available on SCInet's Haiti page.

In the summer of 2010 the *Christian Science Monitor* published an equally uninformed and unfortunate observation about solar cookers, this time from an American residing in Haiti: "Even though deforestation is a huge problem in Haiti, because the trees have almost all been cut down to make charcoal, Haitians are not interested in the solar cookers that foreigners have been trying to get them to use as an alternative fuel source. Why? Because food cooked over a solar cooker has no taste." \*

Although the solar cooking community continued to push for solar cookers and retained heat cookers for Haiti, the U.S. government ultimately funded an \$8 million project to provide Haitians with improved charcoal stoves and liquefied petroleum gas (LPG) stoves. When the project was formally announced, SCI volunteers in the Washington, D.C. area once again contacted senior U.S. government officials to ask them how the people of Haiti would be able to purchase LPG without long-term, market-distorting subsidies. None of the officials could provide a rational explanation for USAID's decision to promote the purchase of LPG in the poorest country in the western hemisphere, where 80% of the population lives on less than \$2 per day. Questions about the rationale for promoting improved charcoal stoves in a country, which had already destroyed most of its forests to make charcoal, also went unanswered.

In 2012, the \$8 million USAID contract for this project was awarded to Chemonics. It targeted nearly 10,000 street food vendors in Port-au-Prince and 800 schools and orphanages in and around the capital. In February 2014, a U.S. government audit of this project concluded that Chemonics had failed to meet most of its objectives to reduce charcoal consumption. Few Haitians had purchased the improved charcoal stoves, because they cost five times as much as traditional charcoal stoves. Very few LPG stoves, which cost \$100, were sold. Only 337 of the planned 4,550 street food vendors, orphanages, and schools had shifted from charcoal to LPG.

Haiti, which has almost no trees left, needs solar cookers and retained heat cookers to be part of a sustainable cooking solution for that country's fuel shortages and deforestation.

SCI and the international solar cooking community will continue their efforts to convince the U.S. government and other large donors and aid agencies to support sustainable cooking solutions that include the cleanest, cheapest and most abundant of all fuels—the sun.

<sup>\*</sup>People who traditionally cook over open fires are accustomed to grilled foods having a smoky taste. PM-Editor