



WorldStove Pilot Programs

There are two purposes to pilot programs:

One is to develop and test a regionally specific version of the LuciaStove.

The other is to determine the feasibility of establishing a stove hub through the Five Step Program in a specific area.

LuciaStoves can adapt to local traditions, thus preserving cultures and foods and respecting ways of life that, in some cases, have been unchanged for centuries.

Cooking is a critical component of many cultures, and the fact that fire has for most of the world been the main way of doing so makes it a critical cultural tradition. Fire is so central to families and the definition of household that for many cultures the words for fire and focal point of the family often have the same root origins and in some cases are the same word. One advantage of the LuciaStove, in contrast to other stoves and cooking systems, is that its flexibility allows it to be adapted to local cooking traditions, customs and available fuels rather than presuming that people will change or renounce their traditions to suit a specific stove.

Adaptability of the LuciaStoves takes into account many factors from cooktimes, to local fuels to cooking methods and preferred cooking positions. For example, some cultures prefer cooking at a height of 30 cm above ground, others on the ground, or standing. Some local recipes require high temperatures and short cooking periods (as is sometimes the case western China) while in Zambia, simmering at low temperatures may be required for up to 6 hours. As an extreme case of long cooking times, the beer makers in Dolotieres of Burkina Faso have two cooking periods of 4 and 12 hours, (Dolo production consumes 20% of the wood burned in the capital city, Ouagadougou of about 1.5 million people. www.hedon.info/BP10:ImprovedBeerCookersInBurkinaFaso)

In terms of geometric variations we have developed LuciaStoves with a clay disks know as a mitards for Ethopia, and planchas, an essential part of cooking in Honduras. For the Uighur of western China we have developed a LuciaStove with a naag oven, and for cultures that have the tradition of cooking on a three rock stove, we have developed a configuration of the LuciaStove that can be buried in the ground. The addition of three rocks to buried stoves permits traditions to be conserved while allowing fuel savings of up to 90%. Heating, as well as cooking, may also be needed, and both are available in the LuciaGrrr, developed for the yurts of Mongolia.

Finally as fuel wood becomes more expensive, many are faced with choices of food or fuel. The LuciaStove, being a pyrolytic stove, can be adapted to burn most small fuels, too small for traditional fires and thus considered unusable. Some of these fuels require modifications of the stoves and the pilot program is the ideal system of determining that.

Feasibility of going beyond the Pilot Program

Is it feasible or economically advantageous to establish a stove hub through the five step program in a specific area?

Stove Hubs provide the opportunity for local economic growth and small business development. But for them to succeed, it is important to determine if there is sufficient work force, raw materials, and market demand for improved cookstoves. A pilot program is a low cost way of doing this prior to attempting the more expensive five step plan.

For these reasons a Pilot Program are often considered a first step. A maximum of 35-50 stoves are placed in the field. Pilot programs should last between 3 and 6 months, with the objective of providing significant data which include, but not limited to the following:

Requirements and feasibility for local adaptations of the LuciaStove.

Indoor air quality monitoring.

Blood monitoring of people in cooking area.

Local feedstock documentation and analysis

Local soil analysis

Test plots with biochar for local soil improvement.

Market analysis and business development plan for five step program.

