SEFS PCMI: Johnny Bruce  
Title: A Case Study of Cooking Practices in Paraguay

Abstract

This report describes the domestic cooking processes of people from the lower middle-income country of Paraguay (WDI 2014), and subdivided into rural, town, and city settings (delineation defined by Peace Corps Paraguay criteria). I worked with local committees and families on the construction and design of biomass burning cookstoves and ovens serving as an Environmental Conservation Peace Corps Volunteer in rural central Paraguay from 2011-2013. Throughout my service, I noted that in all settings, rich or poor, city or rural, families with improved technologies such as electric and/or gas ovens/stoves still chose to cook using biomass – many habitually cooking with open fireplaces, as revealed by their soot covered ceilings. The global negative consequences of inefficient cooking using solid fuels include the deaths of millions of women and children annually, environmental degradation, and low fuel efficiency (Rehfuess et al. 2006, Smith 2012). Informal reasons for not fully adopting modern current types of cookstoves notably included, among others: price, comfort, heat source, ease of use, and time constraints.

This project was designed to assess what types of cooking practices families used; what factors influenced this use; what the cost was; and what variation existed across socioeconomic settings. To help answer these questions, a case study of 45 families in nine different locations was performed in: three cities, three towns, and three rural areas. Additionally, by means of questioning and evaluation of these patterns, this study helps provide insights to help promote the more effective adoption of efficient cookstoves in the future.

Inefficient cookstoves have an adverse effect on health, the environment, and general living conditions. Women and children are especially vulnerable. Improved technologies and options exist; however, uptake and use have lagged behind expectations. Previous work has failed to fully address factors involved in the adoption and diffusion of improved cookstoves. Serving as a Peace Corps Volunteer in Paraguay, I performed a case study, interviewing 45 households in city, town, and rural settings. The
findings indicate that cultural and traditional barriers have prevented effective use and uptake of better options, but that strategies for future improvement do exist.

Cooking practices in Paraguay illustrate how differences within a country are influenced by factors such as geography, socioeconomic area, and cultural traditions. When designing improved cookstoves, it is important to note that these factors must be addressed. For example, some claimed to dislike the ‘rocket stove’ design because it was low to the ground - bringing about back pain, and a potential source of danger to children - necessitating design improvements. A desire for the traditional model stemmed from more than cookstove function. The model was historically viewed as ‘normal’. The model represented a status symbol that expressed a step-up socially, and amongst neighbors. Other wood burning models were difficult to introduce because they did not have this same sense of normalcy or social respectability.

Proximity to Argentina and lack of available fuelwood were factors increasing gas usage in the B region of the study. Households were heavily influenced by the Argentine economy and poor road conditions linking communities to outside resources. The households were different in their cooking practices compared with other Paraguayan communities because of these factors.

The rapid population and urban growth will require more, as well as alter resource use. Continued wood scarcity could mean a promotion of electricity usage instead of an improved fuelwood cookstove if fuelwood access is minimized, and prices continue to increase. The aforementioned variation in fuel type use in Paraguay should be recognized when determining policies of improved cooking practices.