

Burning Issues:

Domestic Woodfuel Use for Cooking in Lamu, Kenya

by
Karen Levy

Thesis

submitted in partial fulfillment of the requirements for the Degree of
Bachelor of Arts with Honors in Environmental Studies at Brown

University
May 1994

Abstract

Discussions of 'energy issues' frequently focus on fossil fuels and other 'modern' fuels. However, for most of the world's people, wood and charcoal are the primary sources of energy. The demand for woodfuel energy from Third World households is tremendous; it is the single largest source of demand for energy in most developing countries. Most of the woodfuel used in the home is used for cooking. Eighty percent or more of the energy consumed in the home is for food preparation.

At the same time that there is a tremendous demand for woodfuel, the woodfuel itself is rapidly disappearing. Deforestation is rampant in much of the Third World; only nine trees are planted for every 100 that are cut down. This growing shortage has placed an undue hardship on many of the women in the developing world that are responsible for collecting fuel and feeding their families. Women are forced to walk further and further or pay higher and higher prices to acquire the fuel they need. Fuel shortages can also lead to malnutrition, as all major food crops in Africa must be cooked to be palatable.

The use of woodfuel is also associated with a number of other problems. For example, smoke inhalation is a leading health problem in developing countries. Five million children die under the age of five each year due to Acute Respiratory Infection, can be caused and is exacerbated by smoke exposure.

For many decades, various development projects have tried to deal with some of these issues. Afforestation programs have attempted to solve the problem by increasing the supply of wood. Improved charcoal production programs have attempted to increase the efficiency of the consumption of those trees through enhancing the carbonization process. Improved stove programs have tried to reduce consumption of woodfuel on the household level by increasing the efficiency of the cooking instrument. Many of these projects have not been very successful. One of the major reasons for the lack of success has been a hesitancy to examine woodfuel use holistically, rather than merely from the perspective of the cooking instrument. In addition, projects have ignored regional differences in cooking practices and in pertinent woodfuel issues. Since cooking is a deeply-embedded cultural activity, ethnographic techniques might provide the qualitative information necessary to improve these programs.

For example, cooking-related behavior in Lamu, Kenya is extremely complex. A wide range of factors contribute to woodfuel-related decisions and practices. Women use many different types of stoves and fuels, and must balance a number of needs when preparing meals. Women must take traditional, financial, aesthetic, and time factors into account at all times when cooking. Deforestation and smoke exposure are not recognized locally as salient issues, but flexibility and financial and time efficiency are extremely important to women.

All of these issues are impacted upon by a wide range of factors, including kitchen and fuel storage design, cooking practices and technology, and traditional preferences. If a program starts with a problem or an issue, and integrates some or all of these factors in developing a strategy, then it will be able to develop a more effective program. By starting with a piece of technology, a project may overlook some of the more significant factors that contribute towards woodfuel-related problems. In examining domestic woodfuel use for cooking ethnographically, both relevant problems and potentially effective solutions can be identified.