

## **Consuming Fuel and Fueling Consumption: Modeling Human Caloric Demands and Fuelwood Use**

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This paper describes a conceptual framework that was developed to integrate livestock, human, cultivation, and forest constraints to model community fuelwood consumption over a 25-year planning horizon. This framework was constructed as an energy balance based on human caloric requirements in order to examine the effects of household-level decisions for nutrition, fuelwood and land use. One scenario from a virtual community in Uganda is presented within this paper to illustrate the utility of this model to allow rapid policy and scenario evaluation. User-defined inputs combined with published research data are used to simulate resource responses and energy consumption rates. This model is one potential tool to monitor fuelwood consumption and to understand the implications of various land-use practices.

**Keywords:** community resource use plan, integrated planning, human caloric requirement

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