Mapping biomass markets in Iowa

Abstract: Three different models for marketing and supplying alternative food and fuel products were prepared and shared with the public.

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This project focused on developing the ability to assess food and fuel needs and capabilities locally. It helped farmers and affiliated agencies identify and target local market and capacity goals that were less dependent on long-distance transportation.

What was done and why?

Energy and environmental concerns are sparking interest in lessening the distance food products are transported to reach consumers. At the same time, increasing market demand for more local and regional food products is allowing agricultural production to shift from specialization and export marketing toward more localized markets and supply lines. Instead of “locking in” specific markets and supply lines, emerging technologies can more broadly adapt the lowest cost feedstocks into the highest valued products needed in a particular area. This ability to adapt reduces the distance that products need to travel to achieve full market value.

The central objective of this project was to focus data and attention on localizing the supply lines that service food and fuel markets. The project goals were to:

1. Develop a spreadsheet-based model that compares and communicates fuel demands and potential biomass capabilities at the county level in Iowa, and
2. Develop a web site that can be accessed by local food advocacy groups throughout the country to assess food needs and move toward systems that are less dependent on long-distance transportation.

What did we learn?

The goal for the project was to receive at least five unsolicited contacts per model. The food market model and web site were successful at meeting this goal, the fuel models were not. The detailed fuel model proved too complicated with too many variables and options to appeal to the reviewers. The summary fuel model, while simpler, also failed to generate significant responses. The models are available on request from the co-principal investigator.

The food market estimator model was revised to make it more user-friendly and is now hosted by CTRE, but available on the Leopold Center web site at www.ctre.iastate.edu/marketsize/. Because of this revision and promotion by the Leopold Center, the tool proved to be much more successful at generating interest. Web use statistics for the first 138 days indicated 4,100 visits, or an average of 29 visitors/day. There were 19,600 “hits” during this initial period (which translated to about 52,000 page views annually). Leopold Center staff receives an estimated three calls or e-mails per week with questions about this tool.