Local Economic Development and Growth of Bioeconomy

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Biofuel Industry Impacts on Local Economic Development

- Biorefinery impacts and local economic growth
- Community development and a growing bioeconomy
- Environment and amenity tradeoffs in local economic growth

Local Economic Impacts
Impacts of Biorefinery

- Jobs as measure of local economic impact

- Biorefinery scale matters
  - 50M gal plant – 36 direct jobs
  - 100M gal plant – 46 jobs

Local Economic Impacts
Impacts of Biorefinery

- **Rural vs. urban communities**
  - Biorefinery job creation multiplied 3-4 times
  - Impacts larger in rural than urban areas
- **Biomass refinery**
  - 70 M gal plant – 70-79 direct jobs
  - Increased feedstock handling jobs

Economic Impacts of Biorefinery on Local Economy

- **Ethanol production may displace livestock jobs**
  - 100M gal plant - 36M bu corn - 46 direct jobs
  - 3.7M hogs - 36M bu corn to finish - 100-240 direct jobs
- **Net job impacts of biofuel expansion**
  - Expanded biofuel production may create and cost jobs
  - Estimate net job impact using large global model

FAPRI **Market adjustments** **Trade flows**

Economic Impacts of Biorefinery on Local Economy

- **Impacts on Iowa economy**
  - Larger the area considered, smaller the impact of new biorefinery. But, aggregate numbers do matter
  - 1,800 direct jobs; over 400 added in last year not including construction
  - 6,000 jobs created through multiplier impacts

Community Impacts of Growing Bioeconomy

- Growing jobs and incomes
  - Necessary for local economic growth and development
- Creates local market and entrepreneurship opportunities
- Provides stimulus for social capital creation
  - Local versus outside investment
- Reduces poverty and improves public service efficiency
  - Spreading costs over more units

Environmental and Amenity Impacts of Growing Bioeconomy

- **Environmental impacts**
  - Water quality
  - Air and landscape quality
- **Water quantity and quality impacts**
  - Water use per gallon of biofuel
  - Local water supplies (aquifers)
- **Local and regional amenities**
  - Recreation amenities attract businesses/residents
  - Contribute to local economic development
  - Converting CRP to energy crops reduces amenities