Agriculture as a Source of Fuel
Prospects and Impacts, 2007 to 2017

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A Major Structural Change for Agriculture

Assumptions:
- Crude oil prices will hold near to $60 per barrel
- Blenders’ tax credits will be extended
- Essence of 2002 Farm Bill will continue
- Demand for feedstock will be driven by existing and
  planned ethanol and biodiesel plants
- Supply of feedstock will be from domestic sources

Analytical Tool: AGMOD, econometric model of
U.S. agriculture

U.S. Ethanol and Biodiesel Production
1995 to 2006 and Projected to 2017 (Mil Gal)

Utilization of Coarse Grain for Livestock Feed,
Exports and Ethanol, (Million MT)

Total Feedstock for Biodiesel Production
Showing the Share from Soybean Oil (Mil. Pounds)

Gross Margins over Variable Costs
on Corn and Soybeans, Crop Years ($/Acre)
### Harvested Acreage of Corn and Soybeans (Mil. Acres)

![Graph of harvested acreage of corn and soybeans from 1995 to 2015.]

- **Corn**: Steady increase from 60 to 85 million acres.
- **Soybeans**: Slight decrease from 75 to 70 million acres.

### Returns from Ethanol Production over Variable and Fixed Costs

Including a Nominal Allowance for Equity ($/Gallon)

![Graph of returns from ethanol production over variable and fixed costs from 1995 to 2015.]

### Prices on Choice Steers and Barrows and Gilts

1995 to 2006 and Projected to 2017 ($/Cwt.)

- **Steers**: Steady increase from $30 to $100 per Cwt.
- **Barrows and Gilts**: Steady increase from $40 to $90 per Cwt.

### Price of Farmland in the Corn Belt

In Nominal and 2000 Dollars ($/Acre)

- **Nominal**: Steady increase from $600 to $6000 per Acre.
- **2000 $**: Steady increase from $1000 to $5000 per Acre.

### Conclusions

- **Significant increase in income and equity for cash crop producers**
- **Reduced production and higher prices on livestock, particularly hogs and poultry**
- **Returns to ethanol and biodiesel producers will rapidly converge to breakeven levels**
- **Biodiesel industry will need corn oil from DDGS**
- **Acreage will be needed from the CRP**
- **Ethanol from cellulosic feedstock will be small**