U.S. Domestic Support and Climate Change

Robert L. Thompson

Gardner Endowed Chair in Agricultural Policy
University of Illinois at Urbana-Champaign
May 12, 2009
Figure SPM.7. Relative changes in precipitation (in percent) for the period 2090–2099, relative to 1980–1999. Values are multi-model averages based on the SRES A1B scenario for December to February (left) and June to August (right). White areas are where less than 66% of the models agree in the sign of the change and stippled areas are where more than 90% of the models agree in the sign of the change. {Figure 10.9}
Precipitation in the United States
Farm Resource Regions

Northern Great Plains
- Largest farms and smallest population.
- 5% of farms, 6% of production value, 17% of cropland.
- Wheat, cattle, sheep farms.

Heartland
- Most farms (22%), highest value of production (23%), and most cropland (27%).
- Cash grain and cattle farms.

Northern Crescent
- Most populous region.
- 15% of farms, 15% of value of production, 9% of cropland.
- Dairy, general crop, and cash grain farms.

Eastern Uplands
- Most small farms of any region.
- 15% of farms, 5% of production value, and 6% of cropland.
- Part-time cattle, tobacco, and poultry farms.

Fruitful Rim
- Largest share of large and very large family farms and nonfamily farms.
- 10% of farms, 22% of production value, 8% of cropland.
- Fruit, vegetable, nursery, and cotton farms.

Prairie Gateway
- Second in wheat, oat, barley, rice, and cotton production.
- 13% of farms, 12% of production value, 17% of cropland.
- Cattle, wheat, sorghum, cotton, and rice farms.

Southern Seaboard
- Mix of small and larger farms.
- 11% of farms, 9% of production value, 6% of cropland.
- Part-time cattle, general field crop, and poultry farms.

Mississippi Portal
- Higher proportions of both small and larger farms than elsewhere.
- 5% of farms, 4% of value, 5% of cropland.
- Cotton, rice, poultry, and hog farms.
## USDA Expenditures, 2005

<table>
<thead>
<tr>
<th>Program</th>
<th>$ billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Commodity Programs</td>
<td>39.6</td>
</tr>
<tr>
<td>Foreign Programs</td>
<td>5.3</td>
</tr>
<tr>
<td>Rural Development</td>
<td>14.3</td>
</tr>
<tr>
<td>Food and Nutrition</td>
<td>51.0</td>
</tr>
<tr>
<td>Food Safety</td>
<td>0.9</td>
</tr>
<tr>
<td>Natural Resources &amp; Environment</td>
<td>8.7</td>
</tr>
<tr>
<td>Marketing &amp; Regulation</td>
<td>1.8</td>
</tr>
<tr>
<td>Research, Education &amp; Economics</td>
<td>2.7</td>
</tr>
<tr>
<td>USDA administrative overhead &amp; other</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>124.9</strong></td>
</tr>
</tbody>
</table>
# Ag Commodity PAC Contributions to Federal Candidates, 2004 Election Cycle

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Contributions ($ 1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>2,375</td>
</tr>
<tr>
<td>Dairy</td>
<td>1,757</td>
</tr>
<tr>
<td>Cotton</td>
<td>479</td>
</tr>
<tr>
<td>Rice</td>
<td>283</td>
</tr>
<tr>
<td>Peanuts</td>
<td>218</td>
</tr>
<tr>
<td>Citrus</td>
<td>167</td>
</tr>
<tr>
<td>Wheat</td>
<td>100</td>
</tr>
<tr>
<td>Potatoes</td>
<td>57</td>
</tr>
<tr>
<td>Corn</td>
<td>37</td>
</tr>
<tr>
<td>Soybeans</td>
<td>17</td>
</tr>
</tbody>
</table>
The Pre-Farm Bill Landscape

• Many farm groups were happy with the 2002 Farm Bill.
• High grain & oilseed prices due to ethanol expansion, rising meat consumption in developing countries, and weak U.S. dollar were expected to continue for several more years.
• Congress’ budget baseline for ag commodity programs dropped by more than half because no grain or oilseed LDPs or CCPs were expected over next five years due to high prices.
  – The only farm program payments expected were direct payments and cotton program payments.
The Pre-Farm Bill Landscape

• Unprecedented anti-farm program editorial comment in media across the country
• Numerous groups proposed alternatives to present farm programs, including Bush Administration, e.g.
  – Gross revenue insurance in place of disaster payments, crop insurance, marketing loans, loan deficiency payments, & counter-cyclical payments.
  – Public goods investments, e.g. rural infrastructure, research, etc.
  – Payments to farmers for providing environmental services
Growth of U.S. Ethanol Industry

- 2000: 6.4 billion liters of ethanol produced; used 6% of U.S. corn harvest.
- 2007: 22.0 billion liters produced; used 20% of corn harvest (now larger than exports).
- Now 134 ethanol plants are operating with total capacity of 27.3 billion liters; 77 more are under construction or expanding.
- This will bring capacity to 50.8 billion gal. by 2008-09
  - Energy Bill of 2007 mandated 136.4 billion liters of biofuels by 2022, of which 56.9 billion from corn.

Source: Renewable Fuels Association
Corn Used for Ethanol

Year

millions of bushels

The Food, Conservation & Energy Act of 2008 ("The 2008 Farm Bill")

• **Winners**
  – Nutrition Programs: +$10.361 billion
  – Specialty Crops (fruits & vegetables): $1.35 billion of new money
  – Conservation: + $4 billion in CSP & other programs
  – Bioenergy (other than corn-based): +$1 billion
  – Drought-prone states: $3.7 billion

• **Losers**
  – Corn-based ethanol: no new budgetary support; blenders’ tax credit reduced
  – Crop insurance industry: subsidy reduced
USDA Spending by Category

**2002 Farm Bill**
- Nutrition – 62%
- Commodities – 23%
- Conservation – 8%
- Other – 15%

**2008 Farm Bill**
- Nutrition – 68%
- Commodities – 11%
- Other – 12%

Source: Congressional Budget Office
Commodity Programs

• Keep present marketing loan, LDP, and counter-cyclical payment structure for grains, oilseeds & cotton
  – Increase number of supported commodities (+4)
  – Increase some loan rates & target prices, and reduce others (a little); reduce direct payments.
  – Give farmers option of switching Counter-Cyclical Payment (CCP) trigger from market price to state-level revenue from 2010 (ACRE Program)

• Permanent authority for disaster payments
Conservation

- Extends Conservation Reserve Program (authorizes 32 million acres)
- Expands CSP (renamed Conservation Stewardship Program) “working lands” conservation program ($1.1 billion/year)
  - Tiered payments based on conservation practices
  - Cost share environmental practices
- Extends & expands Wetlands & Grasslands Reserve Programs & other programs.
- Increases EQIP funding by $3.4 billion
- Establishes payment limitations on conservation programs
Rural Development

- Water & waste facilities
- Broadband internet
- Rural health care facilities & telemedicine
- Rural firefighters and emergency medical assistance program
- Value-added agriculture, including incentives to fruit & vegetable production, including organics.
- Rural business assistance programs
Biofuels in the Farm Bill

• No more money for expansion of corn-based ethanol industry
• $900 m for cellulosic ethanol: pilot plants, research, & feedstock grower incentives
• Reduce corn-based ethanol blenders credit by 12% to 45 cents per gallon, but create a new cellulosic ethanol blenders credit of $1.01/gallon.
• Extend ethanol import tariff 2 years beyond current expiration in Dec. 2010, but no reduction in the tariff rate.
Vilsack Priorities for USDA

• Enhance health & nutrition of Americans; reduce childhood obesity; alleviate hunger here and abroad.
• Modernize food safety system; consolidate into one federal food safety agency?
• Climate change & other environmental priorities; reward farmers for carbon sequestration & reduction in GHG emissions; increase Forest Service’s role.
Vilsack Priorities

- Implement 2008 Farm Bill
  - Direct payments? Payment limitations?
- Provide safety net under profitability of all of U.S. agriculture
- Renewable energy, esp. 2nd generation biofuels; ensure survival of biofuels industry
- Modernize USDA’s computer systems
- Don’t push WTO trade negotiations for now
- Others?
$26-27 Billion for Agriculture in Stimulus Package?

- Nutrition Assistance 17-21?
  - Mainly food stamps
- Rural Development 5-7?
  - Broadband internet; water & sewer
- Farmer Assistance 0-0.8?
  - Mostly disaster payments
- Conservation 0.4?
- USDA Computers & Facilities 0.5?
- Biofuels ?
Many Types of Policies Affect the Food & Agricultural Sector

• Commodity programs
• Trade policy
• Science policy
• Macroeconomic Policy (thru exchange rate, inflation rate and interest rates)
• Credit Policy
• Tax Policy
• Energy Policy
• Environmental policy
• Food safety policy
• Competition Policy
• Animal welfare policy
• Regulatory policy
• Immigration policy
• Rural and economic development policy
• Homeland security policy
Current Food & Ag Issues

• Role of food stamps in federal response to rising unemployment in the U.S.
• Effect of global economic slowdown, input prices & financial crisis on U.S. farmers
  – Access to credit
  – Export demand & risk of more protectionism
  – Land prices
• Revisit 2008 farm bill commodity programs?
  – Budget cost, payment limitations, cotton, other?
More Current Food & Ag Issues

• Energy Policy
  – Role of biofuels, esp. corn-based ethanol

• Trade Policy
  – Complete Doha Round trade negotiations?
  – Brazil cotton case
  – Three unratified bilateral trade agreements
  – Renew Trade Promotion (“fast track” negotiating) Authority (TPA)?
  – Trade Adjustment Assistance (TAA)?

• Transport Policy (crumbling infrastructure)
More Current Food & Ag Issues

- Food safety, traceability & bioterrorism
- Environmental & animal welfare regulations
- Global warming
  - Agriculture’s roles as both a source of greenhouse gasses and as a carbon sink
- U.S. response to short-term food emergencies (food aid) vs investments in long-term ag development in LDCs
  - Get ag back on global development agenda
- Immigration policy