Section B

Food Production and Food System Issues to Consider
What’s Happening to Farm Income?

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The U.S. Food System Is Like an Hourglass

- Crops and livestock produced by farm workers, farmers, and ranchers are funneled into the grip of a handful of firms.
- These firms control both the processing and distribution of food and fiber to millions of consumers around the world.

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Capturing the Retail Food Dollar

Farm Share of Retail Expenditure, 1970-2000

Source: USDA-ERS, Farm Income and Price Spreads.
A Different Way of Looking at the Food Pyramid

- ADM
- Nestle
- Tyson, IBP
- Monsanto, Novartis
- ConAgra, Philip Morris
- DuPont
Top 10 Retailers: 24% of Market Share

- Top 10 food retailers by market share, 2004
  - Wal-Mart, 8%
  - Carrefour, 3%
  - Metro-AG, 2%
  - Ahold, 2%
  - Tesco, 2%
  - Kroger, 2%
  - Costco, 2%
  - ITM, 1%
  - Albertsons, 1%
  - Edeka Zentrale, 1%

Source: ETC Group.
Global Area of Biotech Crops

- Global area of biotech crops increased by 11% (9 million hectares or 22 million acres) between 2004 and 2005 (Source: Clive James, 2005)
- Monsanto is exploring acquisition of Delta and Pine Land
Retailers, not farmers, dominate supply

Adapted from Grievink. (2003). Cap Gemini, OECD. (From Tim Lang).
Happy Companies

Photo by J. Star via flickr.com. Creative Commons BY-NC-SA.
Global Expansion of Transnational Supermarkets

- Global expansion of transnational supermarkets
  - Carrefour (France)
  - Ahold (Netherlands)
  - Metro (Germany)
  - Walmart (USA)
  - Tesco (UK)
## Top 10 Food and Beverage Corporations, 2004

<table>
<thead>
<tr>
<th>Company</th>
<th>Food and beverage revenue in millions of U.S. dollars</th>
<th>Total revenue in millions of U.S. dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nestle</td>
<td>$63,575</td>
<td>$69,862</td>
</tr>
<tr>
<td>2. Archer Daniels Midland</td>
<td>$35,944</td>
<td>$35,944</td>
</tr>
<tr>
<td>3. Altria Group</td>
<td>$69,963</td>
<td>$32,168</td>
</tr>
<tr>
<td>4. PepsiCo</td>
<td>$29,261</td>
<td>$29,261</td>
</tr>
<tr>
<td>5. Unilever</td>
<td>$29,205</td>
<td>$52,267</td>
</tr>
<tr>
<td>6. Tyson Foods</td>
<td>$26,441</td>
<td>$26,441</td>
</tr>
<tr>
<td>7. Cargill</td>
<td>$24,000</td>
<td>$62,907</td>
</tr>
<tr>
<td>8. Coca-Cola</td>
<td>$21,962</td>
<td>$21,962</td>
</tr>
<tr>
<td>9. Mars, Inc.</td>
<td>$18,000</td>
<td>$18,000</td>
</tr>
<tr>
<td>10. Groupe Danone</td>
<td>$17,040</td>
<td>$17,040</td>
</tr>
</tbody>
</table>

Source: Global Food Markets (GFM), Leatherhead Food International.
Concentration in Protein

- Beef packers CR4 = 81%
  1. Tyson (IBP, Inc.)
  2. Cargill (Excel)
  3. Swift & Co. (ConAgra)
  4. Farmland National Beef

- Pork packers CR4 = 59%
  1. Smithfield
  2. Tyson (IBP, Inc.)
  3. ConAgra (Swift)
  4. Cargill (Excel)

- Broilers CR4 = 50%
  1. Tyson Foods
  2. Gold Kist
  3. Pilgrim’s Pride
  4. ConAgra

Source: Hendrickson and Heffernan.
Terminal grain handling facilities CR4 = 60%
- Cargill
- Cenex Harvest States
- ADM
- General Mills

Flour milling CR4 = 61%

Soybean crushing CR = 80%

Exporters?
- Cargill, ADM, Zen-Noh
  - Export 81% of U.S. corn and 65% of U.S. soybeans

Bunge, ADM, and Cargill have 64% of soybean oil processing in Brazil

Source: Hendrickson and Heffernan.
## Concentration in Seed Industry

<table>
<thead>
<tr>
<th>Company</th>
<th>2006 Seed Sales (US $ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monsanto (US)</td>
<td>$4,028</td>
</tr>
<tr>
<td>Dupont (US)</td>
<td>$2,781</td>
</tr>
<tr>
<td>Syngenta (Switzerland)</td>
<td>$1,743</td>
</tr>
<tr>
<td>Groupe Limagrain (France)</td>
<td>$1,035</td>
</tr>
<tr>
<td>Land O’ Lakes (US)</td>
<td>$756</td>
</tr>
<tr>
<td>KWS AG (Germany)</td>
<td>$615</td>
</tr>
<tr>
<td>Bayer Crop Science (Germany)</td>
<td>$430</td>
</tr>
<tr>
<td>Delta &amp; Pine Land (US) - Acquisition by Mansanto pending</td>
<td>$418</td>
</tr>
<tr>
<td>Sakata (Japan)</td>
<td>$401</td>
</tr>
<tr>
<td>DLF-Trifolium (Denmark)</td>
<td>$352</td>
</tr>
</tbody>
</table>

Net Market Income, Dollars per Farm

- Corporate profits rise
- Farm profits fall
Overweight among Children and Teenagers

QuickStats
FROM THE NATIONAL CENTER FOR HEALTH STATISTICS


* Children with body mass index (BMI) values at or above the 95th percentile of CDC sex-specific BMI growth charts for 2000 are categorized as overweight.
Gap Between Health and Advertising Reality

- Television advertising
  - Fatty & sugary foods
  - Mainly confectionary, highly sugared breakfast cereals, prepared foods, and fast food restaurant meals
Growth of Total Meat Consumption

- Annual growth of total meat consumption, by region, 1982-2020

Total meat consumption for 1983 and 1993 are three-year moving averages. The 2020 projections come from IFPRI's global model, IMPACT.

Sources: FAO; IFPRI; Outlook on agriculture, 30, 28.
Kroger Co.

Processor

Cargill/Monsanto

Beef

Retailer

Fred Meyer (1998)

Quality Food Centers

Hughes Markets, Inc.

Keith Uddenberg, Inc.

Ralph’s/Food 4 Less

Smith’s

Dillions

Gerbes

King Soopers

Jay C Food Stores

Foods Co.

Cala Foods/Bell Markets

Owen’s

Hilander

Fry’s

City Market

PriceRite

Kessel

Payless

Source: Hendrickson, Mary.
Wal-Mart

Processes:
- Tyson Foods (IBP)
- Farmland Foods
- Smithfield

Poultry

Beef

Pork

Retailer:
- Wal-Mart

Operations in:
- United Kingdom (#3)*
  - Asda
  - Germany
  - Spar Handels
  - Wertkauf
- Argentina
- Brazil
- Canada
- Mexico
- China
- Korea
- United States (#2)*

Source: Hendrickson, Mary.
Two Food Systems

- There are two types of food systems in today’s world
  1. Industrial food systems—based on production of quantity and efficiency
  2. Sustainable or ecological food systems—based on ecological, economic, social, cultural, and just approaches in an “integral bottom line” based on production of quality
- These systems are already competing for eaters’ allegiance
Food Disparagement Laws

- State civil and criminal statutes
  - Statutory food-disparagement laws have been enacted in 13 states
  - Twelve of these statutes are civil, one is criminal (Colorado)
  - These laws have not been tested constitutionally, but in Texas this was the basis of the lawsuit involving Oprah Winfrey
Pro Diversified Family Farm Laws

- Anti-corporate farming laws in Iowa, Minnesota, North Dakota, South Dakota, and Nebraska are being challenged successfully by Smithfield et al.
- These laws are meant to support independent family farmers in a diversified and localized family-based farm system
In 2005, state legislatures increasingly attempted to preempt, or disallow, local and county initiatives that were mostly aimed at limiting or prohibiting genetically modified (GM) seeds and crops, 19 states passed such laws.
Preemption of Local Control of Factory Farms

- A number of states, such as Iowa, have taken the capacity away from counties to site or zone for factory farms
  - Some communities are trying to find ways around the laws in health ordinances, but not very successfully
- Some counties are requiring that organic produce be used in county institutions, e.g., Woodbury County, Iowa
Pushing Production for Export

- Global call for export production
- Produce as much as you can
- World Bank and IMF require countries to decrease social programs and increase agricultural export
Community Voices

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