Presentation Outline

Drivers
- Macroeconomic
- Policy

Outlook Summary
- Meat
- Dairy
- Feed Grains
- Oilseeds
- Food Grains
- Other Crops
Global Macroeconomic Overview
Real GDP Growth Rates

percent

1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

World  Developing  Developed  United States
Average Growth in Exchange Rate

percent

-4 -2 0 2 4

AU  NZ  EU-15  HU  PO  CN  TH  CA  AR  BR

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Policy and Other Assumptions

- EU CAP Reform and Enlargement
  - EU Sugar Reforms

- Full implementation of the URAA commitments for developed and developing countries

- SPS Assumption
  - Recovery from BSE (North America)
  - Impact of FMD in South America
  - Spread of AI

- Rising interest in renewable fuels
  - Mandatory 2% blend of biodiesel in 2008
  - EU’s Renewable Fuels Directive of 2003
FAPRI 2006 World Outlook

World Meat Outlook Overview
Change in Average Per Capita Consumption

kg per person

-12 -8 -4 0 4 8 12

Meat | Dairy | Oil | Sugar | Grains
Thai Broiler Supply and Utilization

Production
Consumption
Net Exports

thousand mt

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

thousand mt
Per Capita Average Meat Consumption

kg per person

1999 2001 2003 2005 2007 2009 2011 2013 2015

Beef  Pork  Poultry
China Livestock Net Trade

thousand mt

Beef  Pork  Broiler

2005  2015
World Dairy Outlook Overview
Asian Dairy Consumption

thousand mt

percent


Dairy Consumption  Share of China and India
EU Dairy Product Net Trade

thousand mt

- Butter
- Cheese
- NFD
- WMP

1997 1999 2001 2003 2005 2007 2009 2011 2013 2015
Meat Production and Feed Use

thousand mt

thousand mt

Meat Production
Coarse Grain Feed Use
Oilseed Meal Feed Use
World Feed Grain Outlook Overview
Coarse Grain Major Importers

Coarse Grain = Corn, Barley, and Sorghum
World Corn Area and Yield

million ha

mt per ha

Area Yield

Corn Net Imports by Major Regions

thousand mt


Asia  Latin America  Middle East  Africa

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Corn Production by Major Competitors

thousand mt


Argentina EU NMS South Africa
World Coarse Grain Net Trade and U.S. Market Share

thousand mt

percent

140,000
120,000
100,000
80,000
60,000
40,000
20,000
0

1995/96
1999/00
2003/04
2007/08
2011/12
2015/16

Corn
Barley
Sorghum
U.S. Market Share

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World Oilseed Outlook Overview
World Soybean Area and Yield

<table>
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<tr>
<th>Year</th>
<th>Area (million ha)</th>
<th>Yield (mt per ha)</th>
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<td>60</td>
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<td>2015/16</td>
<td>110</td>
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Note: Area and yield data from 1995/96 to 2015/16.
Brazilian and Chinese Soybean Trade

thousand mt


China Imports  Brazil Exports
Crops Market Share Change

percentage point

-25 -20 -15 -10 -5 0 5 10 15 20 25

U.S. Argentina Brazil U.S. Argentina Brazil

Corn Soybeans
World Food Grain Outlook Overview
World Per Capita Food Grain Consumption

kg per person


Wheat Rice
Wheat Net Imports by Major Regions

thousand mt

Asia  Latin America  Middle East and Africa


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World Grain Prices

dollars per mt

- Corn, U.S. FOB Gulf
- Wheat, U.S. FOB Gulf
- Rice, FOB Bangkok 100% B Grade
World Wheat Area and Yield

million ha

mt per ha


Area Yield
World Rice Area and Milled Yield

<table>
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<th>Year</th>
<th>Area (million ha)</th>
<th>Yield (mt per ha)</th>
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FAPRI 2006 World Outlook

Other Crop Outlook Overview
World Sugar Price and Net Trade

Net Exports

FOB Caribbean Price

thousand mt

dollars per mt


Net Exports
FOB Caribbean Price
World Sugar Area and Yield

million mt

mt per ha


Beet Area  Cane Area  Cane Yield

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World Ethanol Price and Net Trade

- **Net Exports**
- **World Ethanol Price**

- Million gallons
- Dollars per gallon

- Graph showing data from 2000 to 2014

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Share of Brazilian Sugarcane in Ethanol Production

percent

World Cotton Trade

thousand mt

Brazil Net Export  China Net Import


-1,000  0  1,000  2,000  3,000  4,000  5,000  6,000
Conclusion
Crops include wheat, rice, corn, sorghum, barley, soybeans, rapeseed, peanuts, and sunflower.
FAPRI 2006 World Outlook

Thank You!
Major Sugar Exporters

million mt

Australia  Brazil  EU-25  Guatemala  Thailand

Sugar Stock-to-Use Ratio and Price

percent

dollars per mt


Stocks-to-Use Ratio

FOB Caribbean Price
World Rice Production, Use, and Per Capita Consumption

million mt

kg per person


Production Use Per Capita Consumption

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## EU-15 CAP Reform and Enlargement

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<th>Policy</th>
<th>2004</th>
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<td>294</td>
<td>271</td>
<td>253</td>
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<td>191</td>
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World Wheat Stocks-to-Use Ratio vs. Price

- U.S. FOB Gulf Price
- Stocks-to-Use Ratio

- Data source: Iowa State University FAPRI

World Wheat Area, Production, and Consumption

thousand mt

thousand ha


Production Consumption Area
World Rice Stocks-to-Use Ratio vs. Price

- **FOB Bangkok 100% B Grade**
- **Stocks-to-Use Ratio**

Data points for years:
- 1995/96
- 1999/00
- 2003/04
- 2007/08
- 2011/12
- 2015/16

Axes:
- **Dollars per mt**
- **Percent**
World Rice Trade

thousand mt

World Corn Stocks-to-Use Ratio vs. Price

dollars per mt

percent

- U.S. FOB Gulf Price
- Stocks-to-Use Ratio
World Corn Area, Production, and Consumption

thousand mt

thousand ha

155,000
150,000
145,000
140,000
135,000
130,000
125,000

0
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000


Production
Consumption
Area
World Corn Feed, Food Use, and Per Capita Consumption

thousand mt

kg/ha


Feed Use Food and Other Use Per Capita Consumption

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World Corn Trade and U.S. Market Share

thousand mt

percent


Net Trade  U.S. Market Share
Major Sugar Importers

- Indonesia
- Japan
- Russia and Ukraine
- South Korea
- United States

million mt

Major Beef Importing Countries

thousand mt

1999 2001 2003 2005 2007 2009 2011 2013 2015

China Japan Russia Mexico South Korea Egypt Philippines

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Beef Export Market Share (percent)

2001-2005
- Australia: 22.5%
- Brazil: 7.1%
- New Zealand: 7.6%
- India: 8.9%
- Argentina: 20.1%
- Canada: 8.9%

2006-2010
- Australia: 20.9%
- Brazil: 9.0%
- New Zealand: 9.1%
- India: 8.6%
- Argentina: 8.3%
- Canada: 27.9%

2011-2015
- Australia: 21.0%
- Brazil: 8.9%
- New Zealand: 8.6%
- India: 8.2%
- Argentina: 26.9%
Major Pork Importing Countries

thousand mt

1999 2001 2003 2005 2007 2009 2011 2013 2015

China  Japan  Russia  Hong Kong  Mexico  Philippines

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Pork Export Market Share

2001-2005

- EU: 24.6
- Canada: 14.3
- U.S.: 15.0
- Brazil: 9.3

2006-2010

- EU: 23.4
- Canada: 17.2
- U.S.: 14.8
- Brazil: 12.7

2011-2015

- EU: 21.3
- Canada: 16.9
- U.S.: 16.9
- Brazil: 13.5
Major Broiler Importing Countries

thousand mt

China, Japan, Russia, Hong Kong, Saudi Arabia, Mexico

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Broiler Export Market Share

2001-2005

- U.S.: 37.5%
- Brazil: 15.3%
- EU: 5.9%
- Thailand: 5.9%

2006-2010

- U.S.: 41.5%
- Brazil: 11.9%
- EU: 7.6%
- Thailand: 7.6%

2011-2015

- U.S.: 39.5%
- Brazil: 10.6%
- EU: 7.6%
- Thailand: 7.6%
FOB Northern European Dairy Product Prices

dollars per mt

- Butter
- Cheese
- NFD
- WMP

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015
Annual Growth in Milk Production and Total World Output

thousand mt

N. America  S. America  EU  Russia & Ukraine  Asia  Oceania
Butter Net Exports for Selected Countries

thousand mt

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

Australia New Zealand EU-15 Other ROW
Butter Net Imports for Selected Countries

thousand mt

- Asia
- Egypt
- Mexico
- Russia
- Other ROW
EU-15 Dairy Production

[Graph showing EU-15 dairy production from 1995 to 2015 for various dairy products such as Butter, Cheese, NFD, WMP, and Milk.]
Cheese Net Exports for Selected Countries

thousand mt

Argentina • Australia • EU-15 • New Zealand • Ukraine
Cheese Net Imports for Selected Countries

thousand mt

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

Japan  Mexico  Russia  United States  Other Asia
NFD Net Exports for Selected Countries

thousand mt

Australia EU-15 New Zealand U.S. India Other Exporters

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015
WMP Net Exports for Selected Countries

thousand mt

Argentina  Australia  EU-15  New Zealand  Other Exporters
NAFTA Real GDP Growth Rates

percent

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

United States
Canada
Mexico
U.S. Livestock and Poultry Prices

dollar per cwt

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

Cattle Hogs Poultry

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World Meat Trade and U.S. Market Share

- Percent: 0, 5, 10, 15, 20, 25, 30, 35

- U.S.
- Other Exporters
- U.S. Market Share (percent)
Russian Poultry Supply and Utilization

Production  Consumption  Net Imports

thousand mt

1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

thousand mt

1,400 1,200 1,000 800 600 400 200 0

1,400 1,200 1,000 800 600 400 200 0
EU NMS Dairy Production

thousand mt

million mt

Butter  Cheese  NFD  WMP  Milk

1995  1997  1999  2001  2003  2005  2007  2009  2011  2013  2015

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Brazilian Soybean Production and Utilization

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (thousand mt)</th>
<th>Consumption (thousand mt)</th>
<th>Net Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995/96</td>
<td>20,000</td>
<td>15,000</td>
<td>5,000</td>
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<tr>
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<td>30,000</td>
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<td>40,000</td>
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<td>2007/08</td>
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<td>2011/12</td>
<td>60,000</td>
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<td>2015/16</td>
<td>70,000</td>
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Chinese Soybean Production and Utilization

Production  Consumption  Net Imports