USDA OUTLOOK FOR GRAINS AND OILSEEDS 2003

Agricultural Outlook Forum
February 21, 2003

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USDA
I. The Setting for 2003
   - Recent Consumption Trends
   - Policy Brief

II. Crop Highlights
   - Acreage Prospects
   - Wheat
   - Corn
   - Soybeans and Products
Global Wheat Disappearance, 1990-2002

- World wheat disappearance gains relatively small
- Food use is flattening out
- Feed use showing healthy gains from 2000
Global Per Capita Wheat Disappearance
1990-2002

Kg.

- World per capita wheat use trending down
- Sharp drop in early 1990s reflected declines in Former Soviet Union
- 2002 increase due to more wheat feeding
Global corn use up substantially in the 1990s, surpassing wheat by 1998

- No growth in world corn use in 2002 due to decline in U.S.
- Increasing feed use accounts for most gains
Global Per Capita Corn Disappearance 1990-2002

- Increases in per capita corn use slowing
- Dramatic gains through mid-1990’s were fueled by China, U.S., and many developing countries
Global Soybean Disappearance, 1990-2002

- World soybean disappearance has almost doubled since 1990.
- In contrast to wheat and corn, soybeans have continued to realize robust gains.
- Soybean meal use up nearly 90 percent since 1990, soybean oil use up nearly 100 percent.
Global Per Capita Soybean Disappearance
1990-2002

- Growth in per capita disappearance remains strong
- Direct consumption of soybeans is very small, and meal and oil account for the growth
- Little indication of slowing in the near-term
2002 Farm Act: Key Provisions

Marketing Loan Program Continues
• New loan rates reflect recent market prices
• Wheat and corn loan rates rise, soybeans drop

Fixed Decoupled Payments Continue
• Direct payments replace PFC payments
• Adds soybeans and other oilseeds

Counter-Cyclical Payments Introduced
• Institutionalizes past market loss assistance
2002 Farm Act: Implications

Wheat, Corn, and Soybeans

2002
- Provisions not certain before planting
- High prices result in minimal marketing loan benefits and no counter-cyclical payments
- Slow program sign up delays direct payments

2003
- Loan rates known
- Lower price outlook brings potential for marketing loan benefits and counter-cyclical payments
- Direct payments enhance cash flow before planting
2003 Acreage Prospects

Wheat
• 63 million acres
  - winter 44.2 million, up 2.5 million
  - spring and durum 18.8 million, up 0.2 million

Corn
• 80.5 million acres, up 1.4 million

Soybeans
• 72.2 million acres, down 1.6 million
Planted Acreage
Corn, Wheat, and Soybeans

Mil. acres


219.9 209.4 215.7

corn wheat soybeans
2003 Wheat Supply Up Modestly
Production Gain Offsets Small Carryin

- Area Harvested
  53.4 mil. acres

- Yield 38.7 bushels
  up from 35.3

- Production
  2065 (+28%)

- Begin Stocks
  445 (-43%)

- Imports 100 (+33%)

- Supply 2610 (+ 6%)

Area harvested: 53.4 million acres

Yield: 38.7 bushels per acre (up from 35.3 million bushels)

Production: 2065 million bushels

Begin stocks: 445 million bushels

Imports: 100 million bushels

Supply: 2610 million bushels
Wheat Use to Rise Slightly
Exports Continue to Slide, Food Use Flat

- Food, seed, indus. (FSI) 1,020 (=)
- Feed and residual 225 (+125%)
- Exports 875 (-3%)
- End Stocks 490 (+10%)
U.S. Wheat Exports to Remain Weak

- Exports from Australia and Canada to recover
- Russia and Ukraine wheat shipments decline, but remain substantial
- Will importers return to traditional suppliers?
Wheat Farm Price Projected at $3.20 in 2003

$ per bu.


1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00
Rebound in Corn Production to Boost Supply
Trend Yield and More Acres Will Lead to Record Crop

- Yield 139.7 bu., up from 130 million bushels
- Production 10,270 (+14%)
- Begin Stocks 929 (-42%)
- Imports 10 (-33%)
- Supply 11,209 (+6%)
Corn Use to Near 10 Billion Bushels

*Sharp Rise in Ethanol, Modest Gains for Exports*

- Feed and residual: 5,650 (+1%)
- FSI: 2,360 (+4%)
- Exports: 1,925 (+6%)
- End Stocks: 1,274 (+37%)
Corn Used for Ethanol Soars
Use Has More Than Doubled Since 1996
U.S. Corn Exports: Modest Gains in 2003

• Lower prices should make U.S. more competitive

• China’s exports likely to decline somewhat, but no dramatic shift assumed

• Steady outlook for Argentina’s exports, will rival China as number two exporter
Corn Farm Price Projected at $2.15 in 2003

$ per bu.

Larger Crop Raises Soybean Supply

Despite Drop in Area, Higher Yield Boosts Production

- Yield 39.7 bu., up from 37.8 million bushels
- Production 2,815 (+ 3%)
- Begin Stocks 165 (-21%)
- Supply 2,985 (+ 2%)
Soybean Use Shows Little Growth

Crush and Exports Stay Below 2001 Records

- Crush 1,670 (+1%)
- Exports 950 (+1%)
- Seed/residual 169 (-6%)
- End Stocks 195 (+25%)
U.S. Soybean Exports Up Slightly

Despite bigger crop, exports not projected to rebound to previous highs

Brazil will continue strong competition for soybean markets

China’s dramatic import growth expected to slow in 2003
Soybean Production

Argentina and Brazil Surpass U.S. in 2002

- Argentina and Brazil’s combined production surpassed the U.S. in 2002
- While U.S. up over 40 percent from 1990 to 2002, production in Argentina and Brazil more than tripled
- U.S. share of world production fell to 39% in 2002 from 51% in 1990
China: Imports of Soybeans and Products

*Soybeans surge, while meal and oil decline*

![Chart showing imports of soybeans, meal, and oil from 1994 to 2002.](chart)

- **Soybeans** surge significantly in 2000 and 2002.
- **Meal** and **oil** decline over the same period.
World Soybean Crush: Share by Region

Latin America and China expanding, U.S. slips in 2002
Modest Rise in Soybean Ending Stocks

Price Response to Low 2002 Stocks Limited

Mil. bu.
Soybean Farm Price Projected at $5.10 in 2003

$ per bu.

Soybean Meal Price Projected at $165 in 2003
Soybean Oil Price Projected at 22.3 Cents in 2003
Reserve slides

- 34  Soy price & S/U Ratio
- 35  Yields Wheat
- 36  “    Corn
- 37  “    Soybeans

Counter-cyclical pmts
- 38  Wheat
- 39  Corn
- 40  Soybeans

- 41-44  China: wheat trade
- ............per cap wheat
- ............corn prod/cons
- ............corn trade

- 45  End Stocks  Wheat
- 46  “    Corn
- 47  Nitrogen rates corn
- 48  Corn seasonal price pattern
- 49  Soymeal disappear
- 50  Soy crush

Sector Revenue 98-02
- 51  Wheat
- 52  Corn
- 53  Soybeans
- 54  Population
- 55  Loan Activity 98-02
- 56  LDPs  98-02
Soybeans Stocks-to-Use Ratio vs. Price
1980-2002
Wheat Yields and 10-year Average by State

No Clear Trend Apparent
Corn Yields and Trend

Bushels per acre

Soybean Yields and Trend

Bushels per acre


Yield range: 20 to 45 bushels per acre
Counter-Cyclical Payments for Wheat

2002

*Market Price* = $3.60
Target Price = $3.86
Loan Rate = $2.80
Direct Rate = $0.52
CCP *rate* = $0.00

- Paid on 85% of base acres x CCP yield
- Trigger point: average farm price below $3.34
- Maximum rate $0.54

2003

*If Market Price* = $3.20
Target Price = $3.86
Loan Rate = $2.80
Direct Rate = $0.52
*Then CCP rate* = $0.14
Counter-Cyclical Payments for Corn

2002

*Market Price* = $2.35
Target Price = $2.60
Loan Rate = $1.98
Direct Rate = $0.28
*CCP rate* = $0.00

- Paid on 85% of base acres x CCP yield
- Trigger point: average farm price below $2.32

2003

*If Market Price* = $2.15
Target Price = $2.60
Loan Rate = $1.98
Direct Rate = $0.28
*Then CCP rate* = $0.17

- Maximum rate $0.34
## Counter-Cyclical Payments for Soybeans

### 2002

- **Market Price** = $5.40
- **Target Price** = $5.80
- **Loan Rate** = $5.00
- **Direct Rate** = $0.44
- **CCP rate** = $0.00

- **Paid on 85% of base acres x CCP yield**
- **Trigger point:** average farm price below $5.36
- **Maximum rate** $0.36

### 2003

*If Market Price = $5.10*

- **Target Price** = $5.80
- **Loan Rate** = $5.00
- **Direct Rate** = $0.44

*Then CCP rate = $0.26*
China Wheat: Exports and Imports

Million mt.


-2 0 2 4 6 8 10 12 14 16

imports exports
Wheat Ending Stocks to Stay Low

Million bushels:
- 1990: 900
- 1992: 500
- 1994: 500
- 1996: 400
- 1998: 900
- 2000: 900
- 2003: 500
Corn Ending Stocks to Increase
*But Remain Lower Than the Late 1990s*

- **1990**: 1,500 Mil. bu.
- **1992**: 2,200 Mil. bu.
- **1994**: 1,500 Mil. bu.
- **1996**: 900 Mil. bu.
- **1998**: 1,800 Mil. bu.
- **2000**: 1,900 Mil. bu.
- **2003**: 1,200 Mil. bu.

Year

Mil. bu.
Nitrogen Fertilizer Application Rate for Corn

Pounds per acre

1991 92 93 94 95 96 97 98 99 2000 2001
Corn: “Normal” Seasonal Price Pattern


Percent of season average

Sep  Oct  Nov  Dec  Jan  Feb  Mar  Apr  May  Jun  Jul  Aug
Soybean Meal Disappearance

Domestic use record high, exports below 2000 peak

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic Use</th>
<th>Exports</th>
<th>Total Use</th>
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<tr>
<td>1998/99</td>
<td>30</td>
<td>10</td>
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<tr>
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Wheat Sector Revenue Up in 2002
Higher prices outweigh lower crop and loss of LDPs

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Revenue</th>
<th>LDP Payments</th>
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<tbody>
<tr>
<td>1998</td>
<td>7.5 Billion</td>
<td>0.5 Billion</td>
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<tr>
<td>1999</td>
<td>6.5 Billion</td>
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<td>2002</td>
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FSA-EPAS
Corn Sector Revenue Up in 2002
Higher prices outweigh lower crop and loss of LDPs
Soybean Revenue Down in 2002
Loss of LDPs and smaller crop outweigh price rise
Population Growth

- World population growth slowing
- 2003 growth rate projected at 1.16 percent, down from 1.58 percent in 1990
- This will amount to 74 million more people to feed in 2003
- US. growth rate projected at 0.9 percent, adding 2.7 million people in 2003
Crops Placed Under Loan 1998-2002*
through Jan. 2003

[Bar chart showing crops placed under loan from 1998 to 2002, with data for wheat, corn, and soybeans.
- Wheat: 1998 - 300, 2000 - 100, 2002 - 200
- Soybeans: 1998 - 2200, 2000 - 1100, 2002 - 1500]
Loan Deficiency Payments, 1998-2002

- Wheat
- Corn
- Soybeans