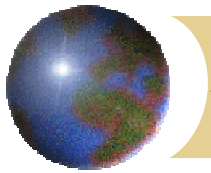


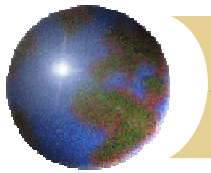
Global Feed Outlook

Thomas E. Elam, PhD
President, FarmEcon.com
Carmel, IN USA
thomaselam@farmecon.com
September, 2006



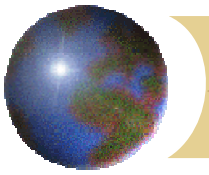
Crop Size & Demand Move Markets

- Feed grain and soybean crops important to prices are in:
 - U.S.
 - China
 - Europe
 - Canada
 - Brazil and Argentina
- Large grain and oilseed crops everywhere have led to controlled and stable prices over the past 5 years
- Current global crop prospects for 2006 imply rising grain costs through mid-2007
- Longer term trends point to even higher pricing levels

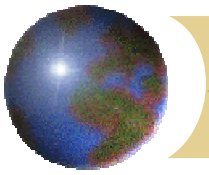


Major economic factors

- Global demand base increases
 - More people
 - Increased incomes
 - Thus more livestock and poultry to feed
 - Plus increasing U.S. demand for ethanol from corn
- But large stocks for key grains will keep prices under control for the next year
- However, weather risks are real, ethanol production is increasing, and stocks are shrinking
- 2007/2008 grain price outlook is very uncertain

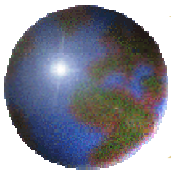


Global and U.S. Feed Grains

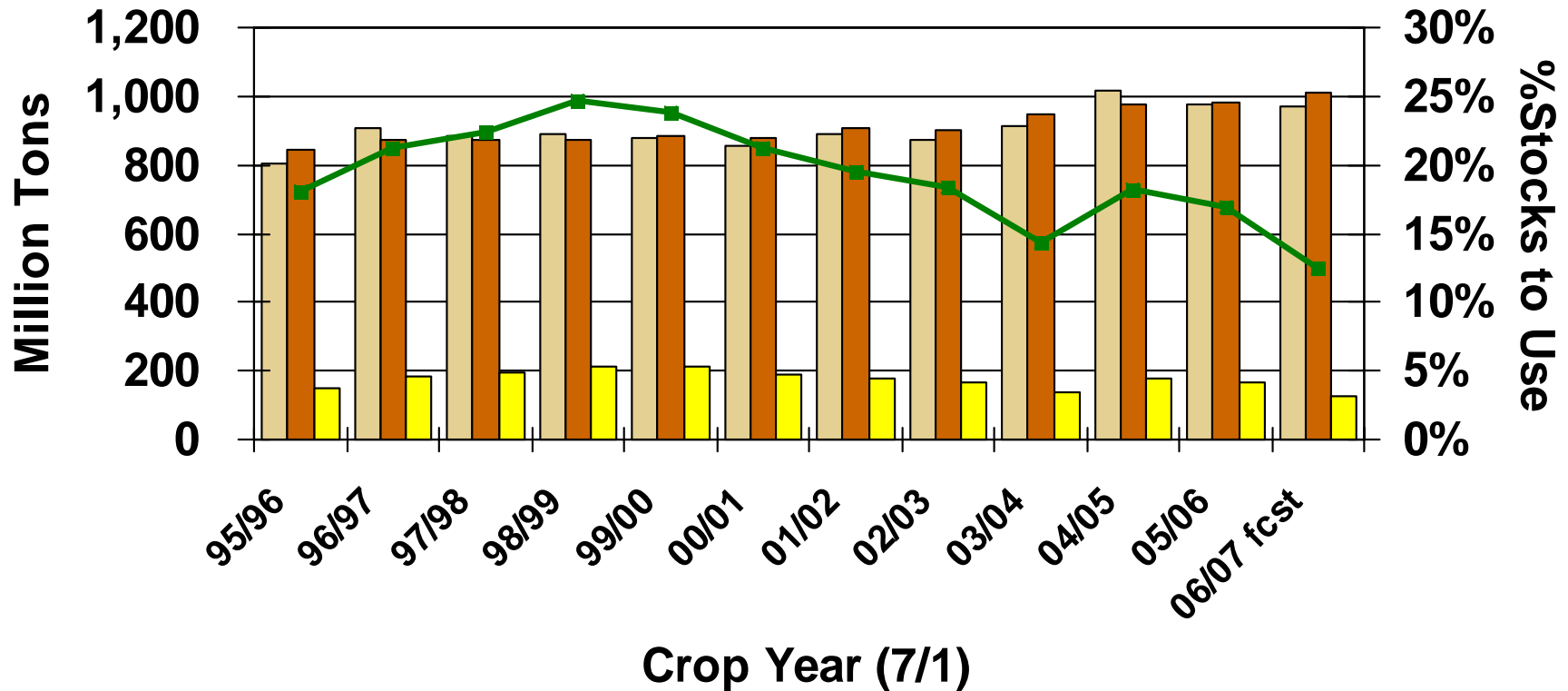


Recent Developments

- Excellent 2006 U.S. crops balanced against weather issues in Europe, Canada and Australia
- Rapid global economic growth driving demand growth faster than long term trends
- Ethanol production from U.S. corn increasing at a very rapid rate

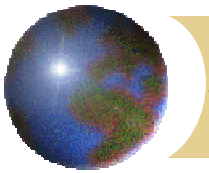


Global Coarse Grain* Balances Production, Use and Stocks



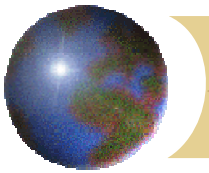
Production
 Total Use
 Stocks
 %Stocks/Use

* Corn, sorghum, barley, oats, rye, millet and mixed grains.

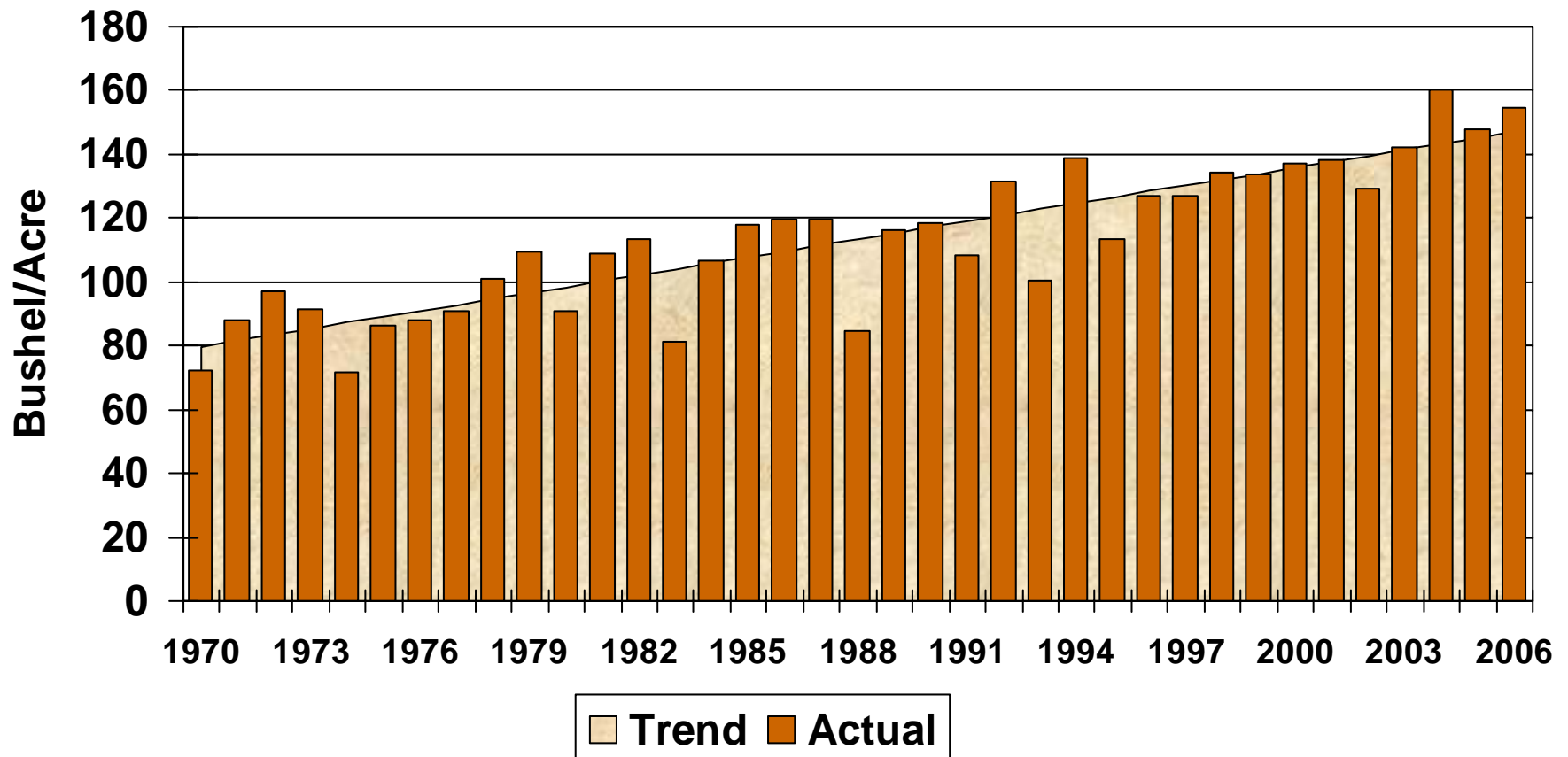


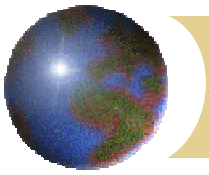
Coarse Grain Comments

- ✚ No major production problems in a decade – almost unheard of
- ✚ Very good crops in recent years
- ✚ Robust demand due to global economic expansion and increasing U.S. ethanol production
- ✚ Forecast stocks declining due to demand growth
- ✚ Production/demand balance indicates higher grain prices to follow in 2007-2008



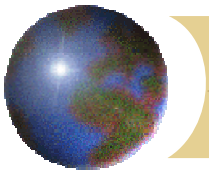
U.S. Corn Yields and Trend



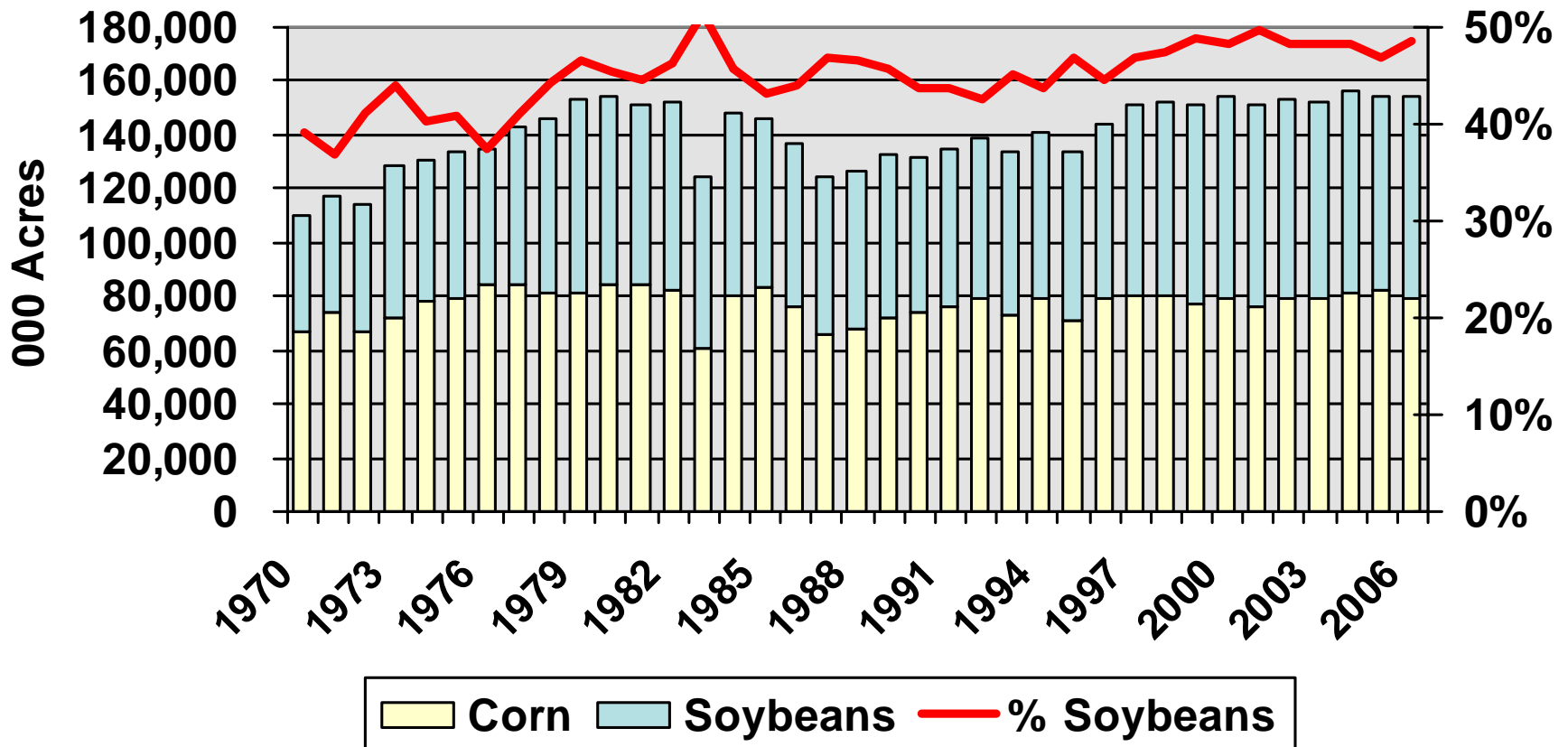


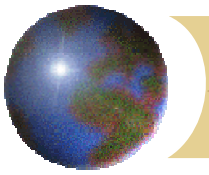
Comments on U.S. Corn Yields

- ✿ Yields over the last decade have raised the trend rate of increase
- ✿ Yields for last 4 years have all been above trend
- ✿ In the last 11 years only 2002 was significantly below trend, and yields are more stable
- ✿ Better hybrids, improved pest management and “micro farming” have all contributed
- ✿ U.S. corn crop is still not immune to weather



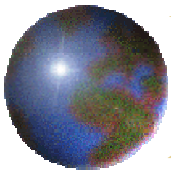
Combined U.S. Corn and Soybean Acreage



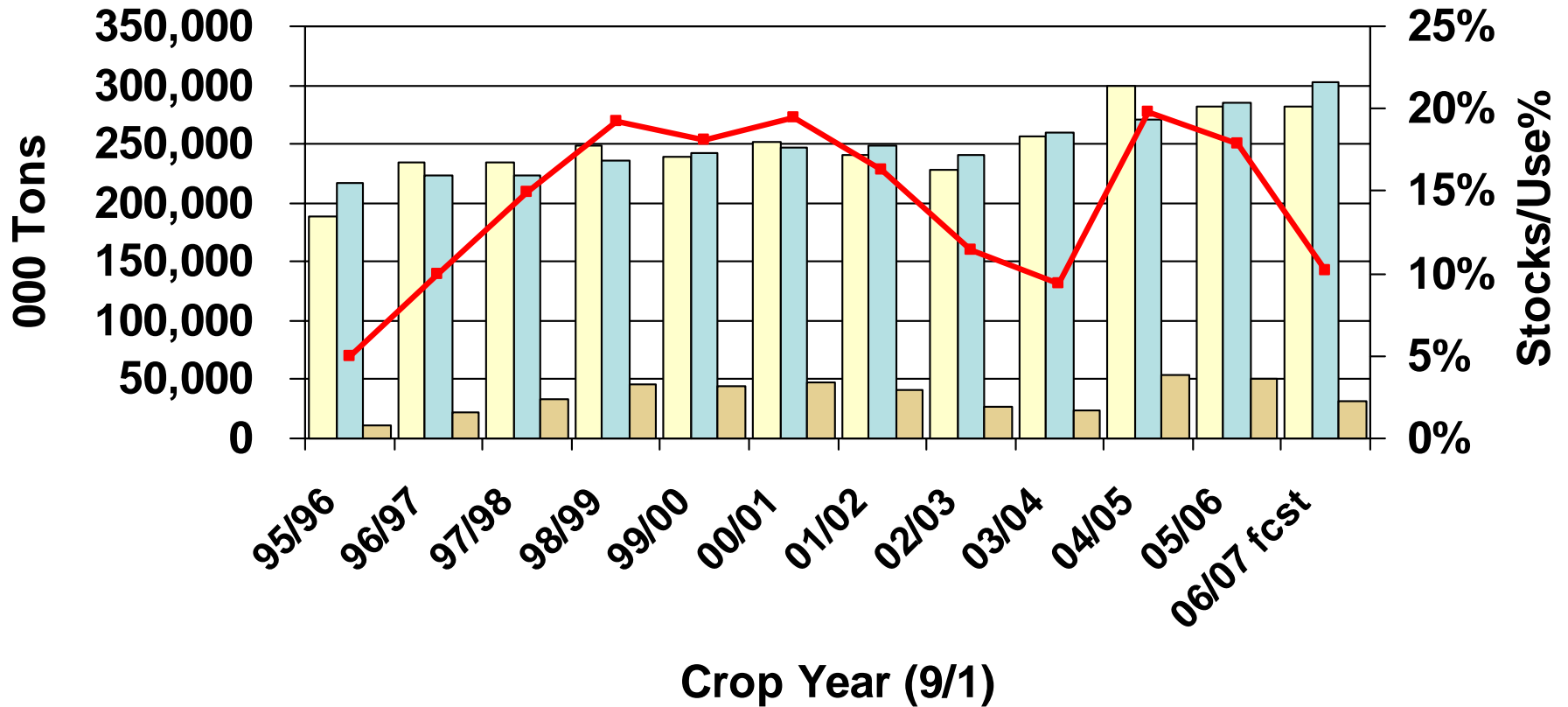


Soybeans Vs. Corn Acres

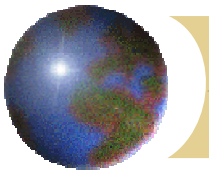
- ❖ Overall total acreage has not changed much since 2000
- ❖ Slow trend up in soybeans vs. corn
- ❖ Trend has been slowed by soybean expansion in Brazil/Argentina
- ❖ Corn yields are increasing faster than soybeans, allowing some shift in acres
- ❖ Increasing ethanol production in the U.S. may reverse this trend



U.S. Corn Production, Use, Stocks

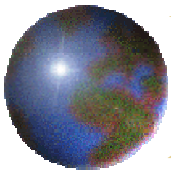


Production Total Use Stocks Stocks/Use Ratio

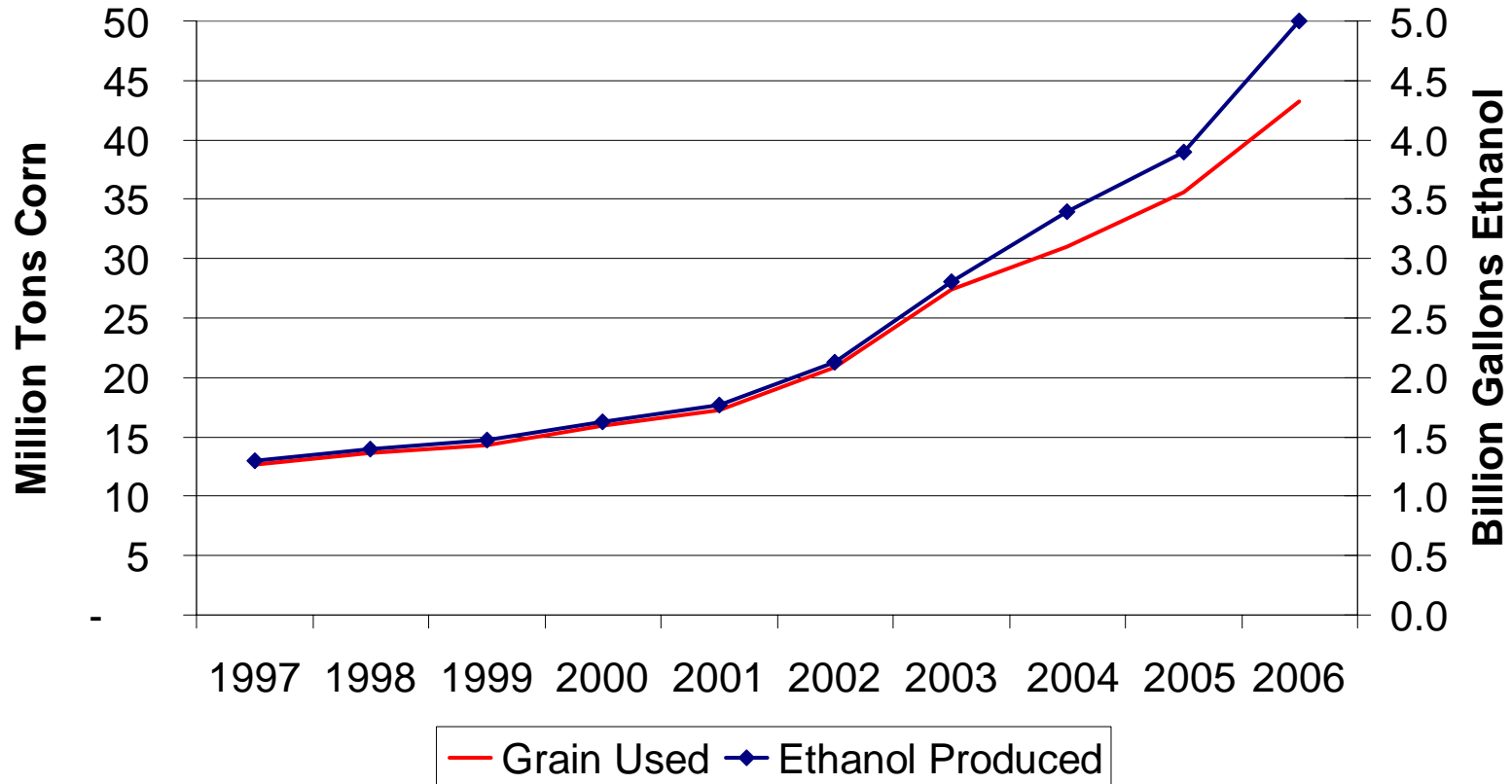


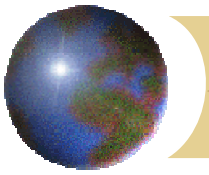
U. S. Corn Supply/Demand Comments

- An excellent 2004 corn crop boosted ending stocks to high levels in 2005/2006
- But - demand is increasing faster than production – all due to ethanol
- Ending stocks in 2007 forecast to be only about 10% of use
- Upward pressure on prices has already begun



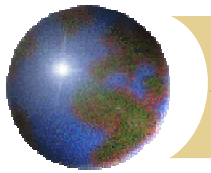
U.S. Ethanol Production and Corn Use Trends





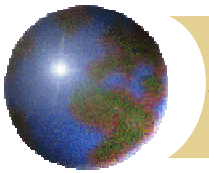
Why is Ethanol Production Increasing?

- ⊕ Higher crude oil prices relative to corn
- ⊕ U.S. Federal and state subsidies of \$0.50-0.60 per gallon
- ⊕ "Green" image
- ⊕ Use as a substitute for MTBE to oxygenate gasoline

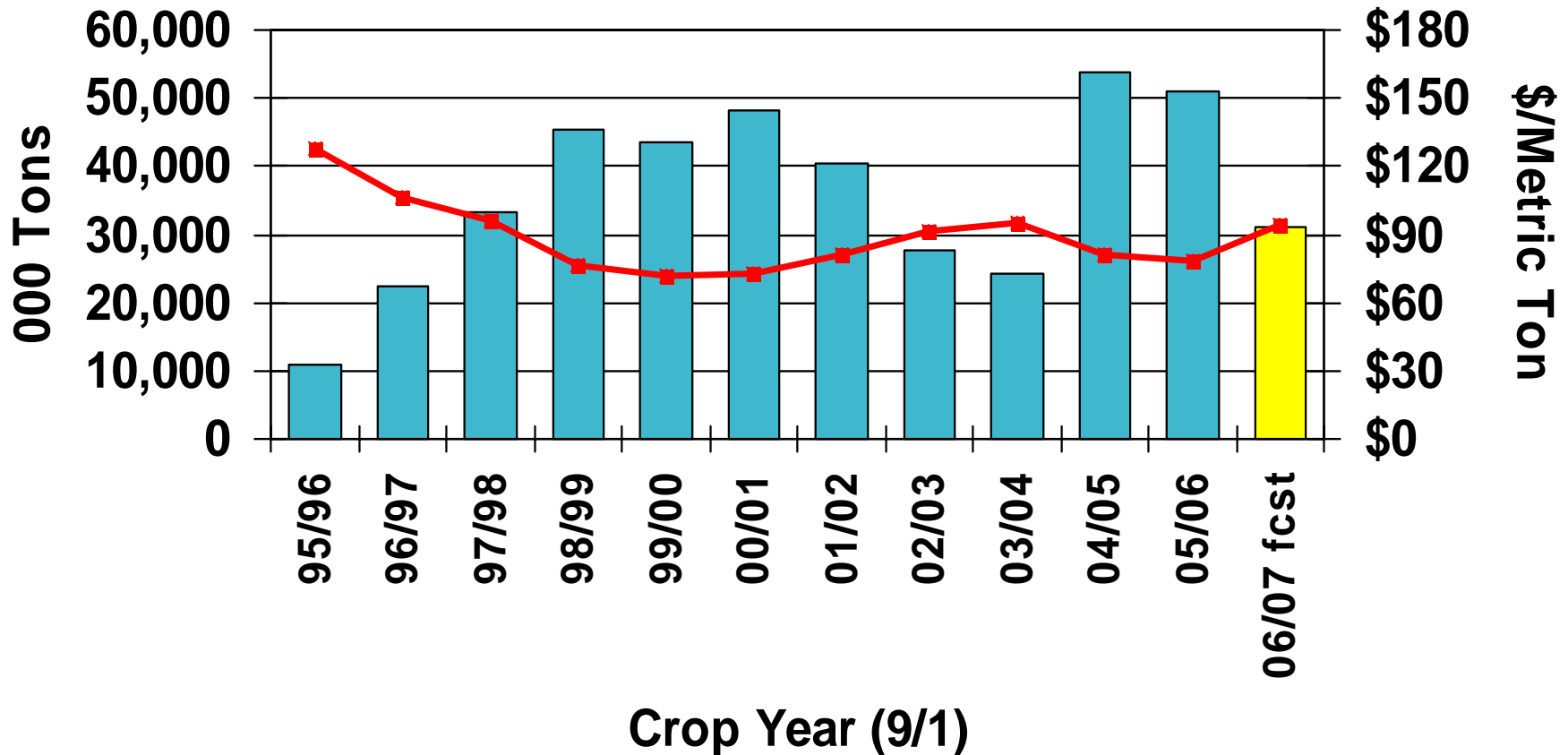


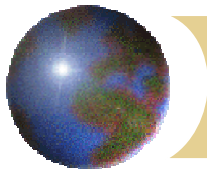
What Makes Grain Prices?

- ❖ U.S. corn supply/demand is a good indicator market for world feed grains
- ❖ Ending U.S. corn stocks are the best indicator of price direction
- ❖ Increasing U.S. stocks = decreases in global prices (and conversely)
- ❖ U.S. government acreage control programs no longer exist – market forces determine acreage and production



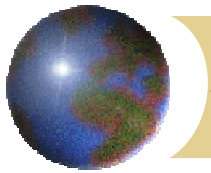
U.S. Corn Ending Stocks and Price





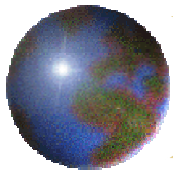
Detailed Global Coarse Grains Supply and Use (000 Metric Tons)

<i>Year (9/1)</i>	<i>Production</i>	<i>Total Supply</i>	<i>Trade</i>	<i>Use</i>	<i>Ending Stocks</i>
2004/05	1,014.1	1,153.8	101.6	975.7	178.1
2005/06 (Est.)	973.9	1,152.0	102.9	984.8	167.1
2006/07 (Fcst.)	969.4	1,136.5	104.8	1,010.8	125.8



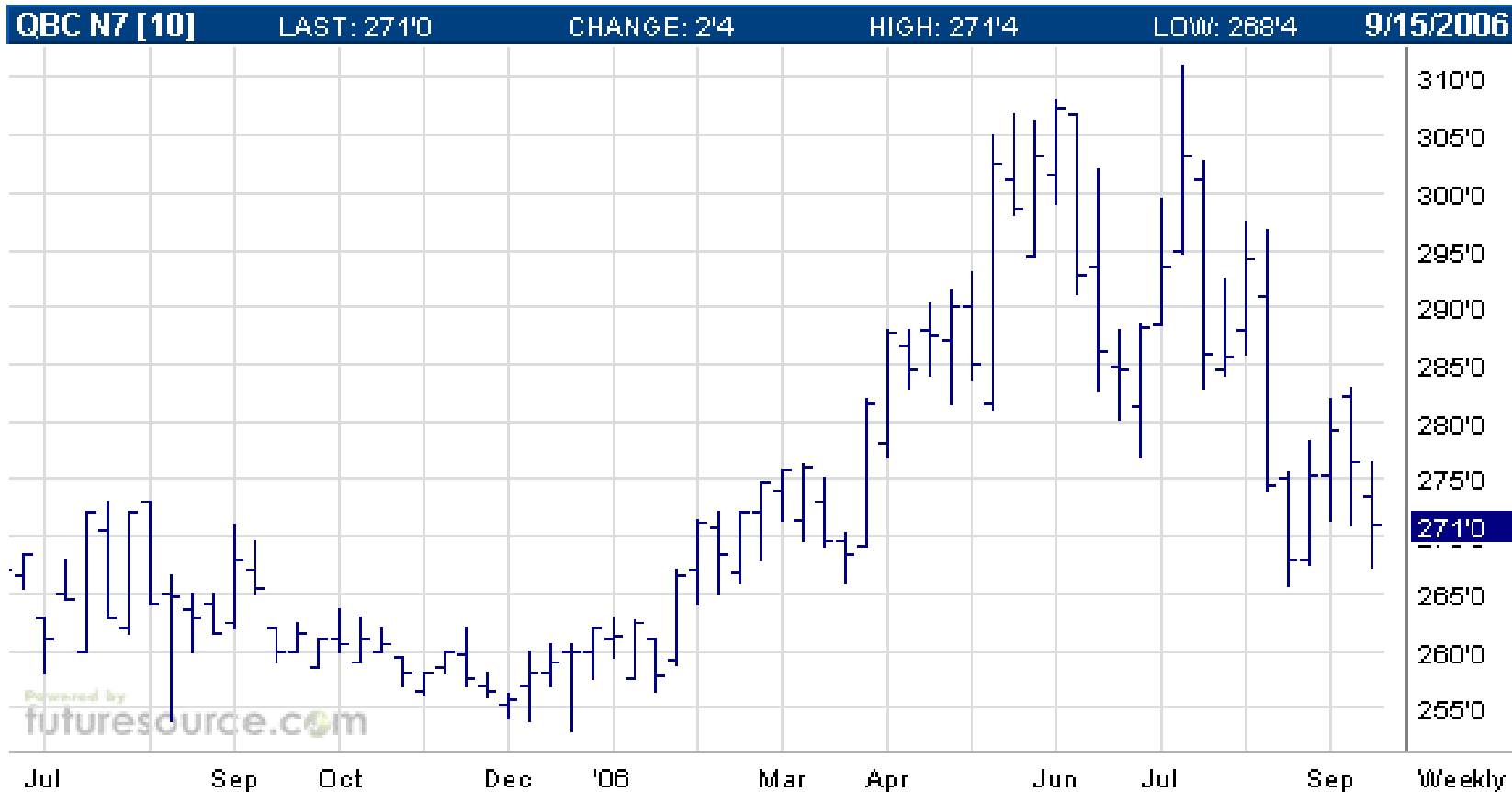
U.S. Corn Supply/Demand Details

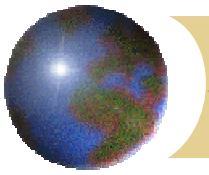
Crop Year, September 1	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Area Harvested (1000 HA)	29,316	27,830	28,057	28,710	29,798	30,395	29,073
Beginning Stocks (1000)	43,628	48,240	40,551	27,603	24,337	53,697	51,100
Production (1000 MT)	251,854	241,377	227,767	256,278	299,914	282,260	282,303
Imports (1000 MT)	173	258	367	358	275	279	254
Total Supply (1000 MT)	295,655	289,875	268,685	284,239	324,526	336,236	333,657
Exports (1000 MT)	49,313	48,383	40,334	48,258	46,181	54,613	57,153
Feed Use (1000 MT)	148,396	148,958	141,303	147,197	156,428	154,947	155,582
Food, Seed, Industrial Use (1000 MT)	49,706	51,983	59,445	64,447	68,220	75,576	89,921
Total Use (1000 MT)	247,415	249,324	241,082	259,902	270,829	285,136	302,656
Ending Stocks (1000 MT)	48,240	40,551	27,603	24,337	53,697	51,100	31,001
Stock/Use Ratio	19.5%	16.3%	11.4%	9.4%	19.8%	17.9%	10.2%



Corn Futures – July 2007

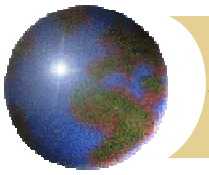
¢/Bushel



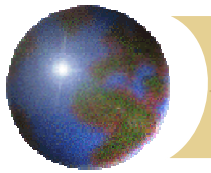


Corn Price Comments

- ⊕ 2006 corn crop is excellent, second largest on record
- ⊕ Futures prices reflect production uncertainty this past summer
- ⊕ Expanding demand is driving prices up
- ⊕ August crop report caused prices to drop, but they are still much higher than the last several years

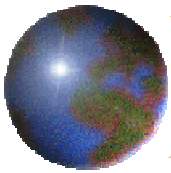


Global/U.S. Oilseeds

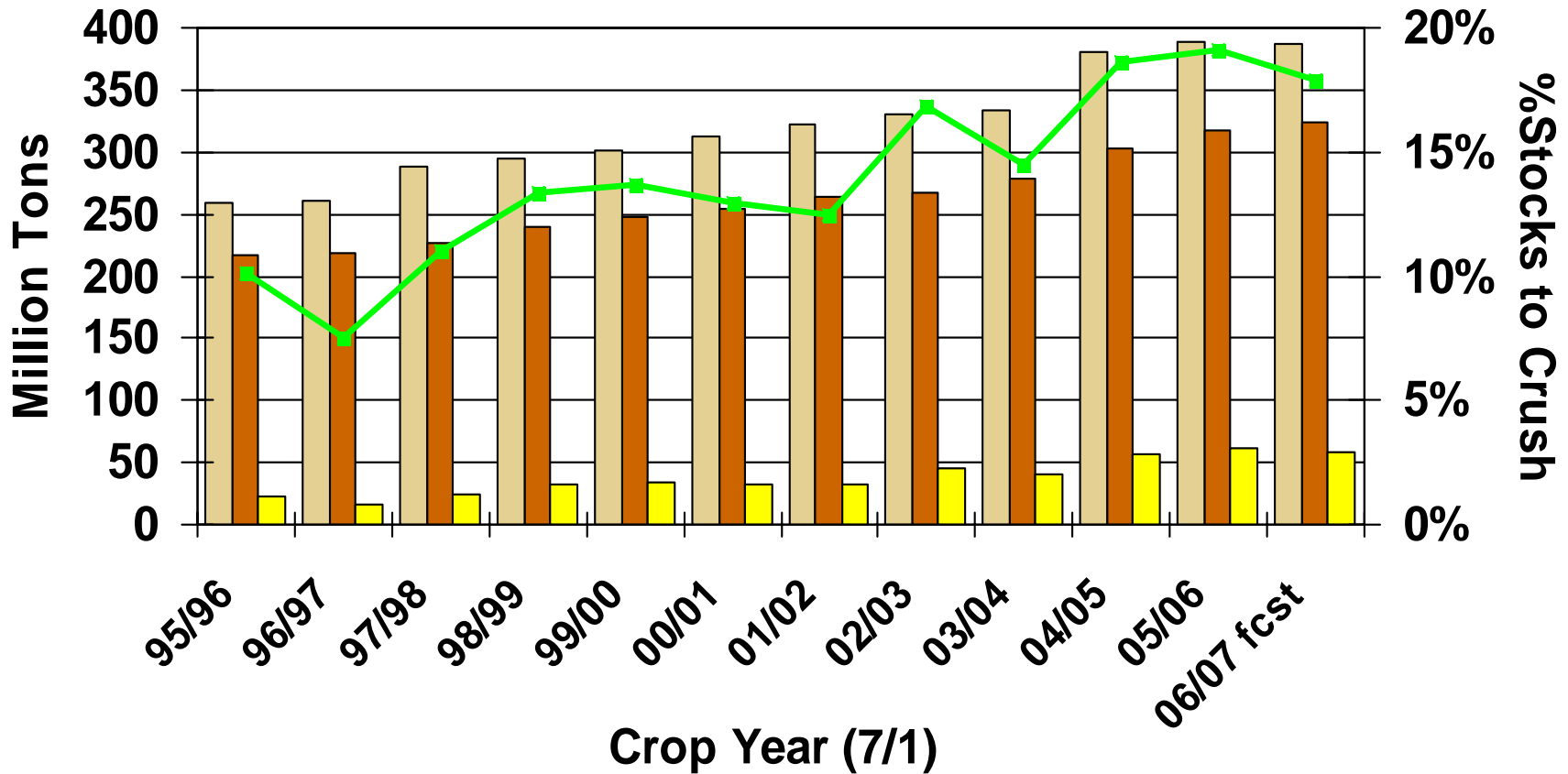


2001/02 Soybean/Protein Outlook

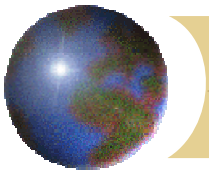
- ❖ Soy market is much more complex than corn
- ❖ Outlook depends on much more than U.S. and South American soybean crop
- ❖ Global soybean and other oilseed production has increased rapidly in the last 5 years
- ❖ All areas sharing in the production growth, EU total oilseeds now larger than China
- ❖ Fuel demand is not affecting this market, demand growing slower than feed grains



Global Total Oilseed, Use, Stocks

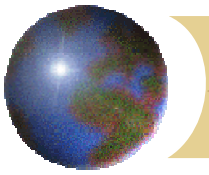


Production Crushings Stocks %Stocks/Crush



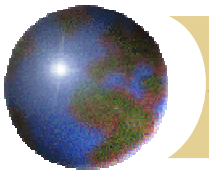
Global Oilseed Comments

- A decade of excellent production growth
- But, demand is also growing rapidly
- So far, production is more than keeping up with use
- If (when?) we have a major production failure, prices will increase sharply

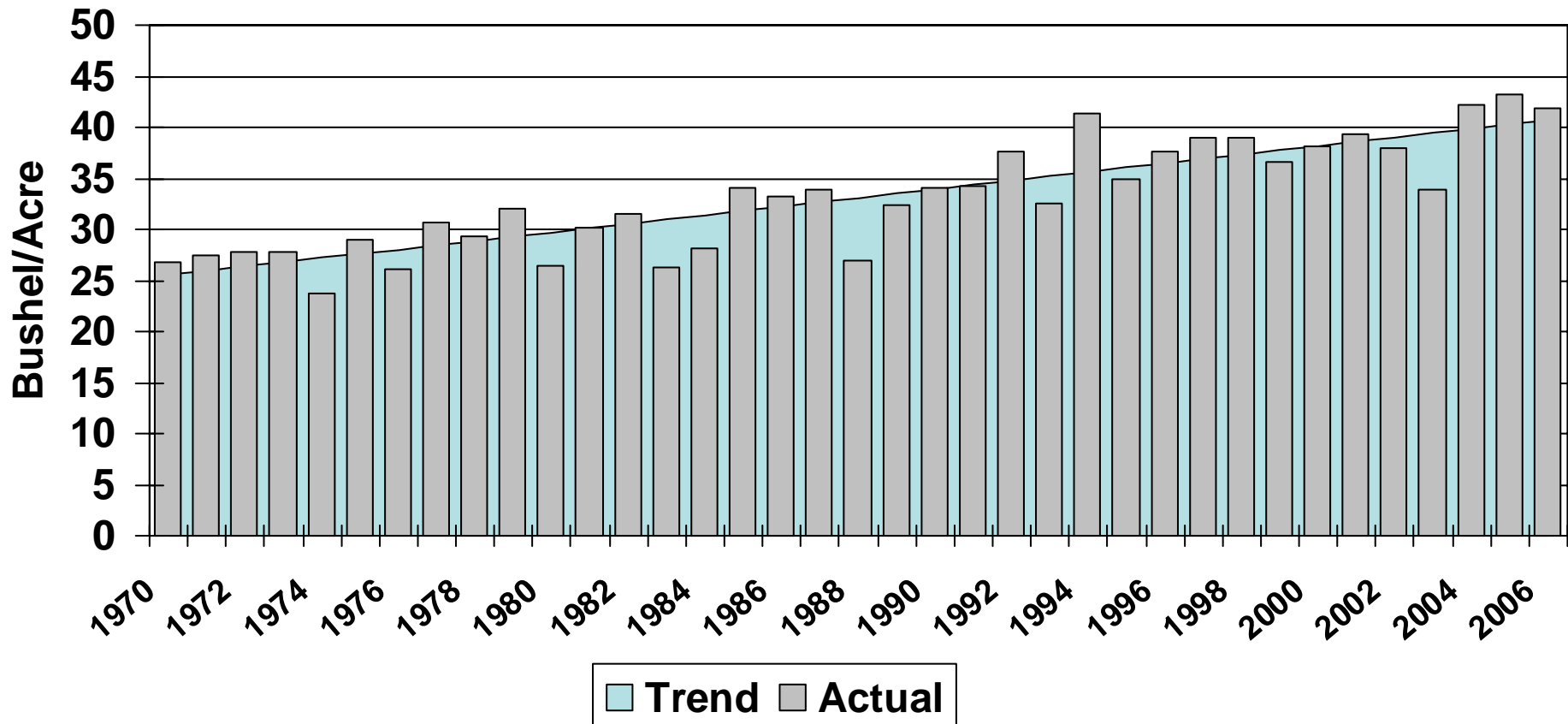


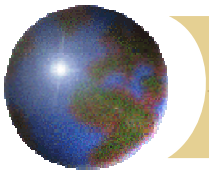
U.S./Brazilian Soybean Situation

- Excellent U.S. yields over the past 5-6 years, Brazil has been disappointing
- New GMO soybean varieties have boosted yields
- Steady acreage increases also helped
- Global demand continues to increase, buoyed by renewed Asia growth
- Soymeal supplies appear to be in balance with demand headed into the 2006/07 season
- Prices appear to be stable in the coming year
- Long term – increased corn demand will reduce soybean acreage in the U.S.

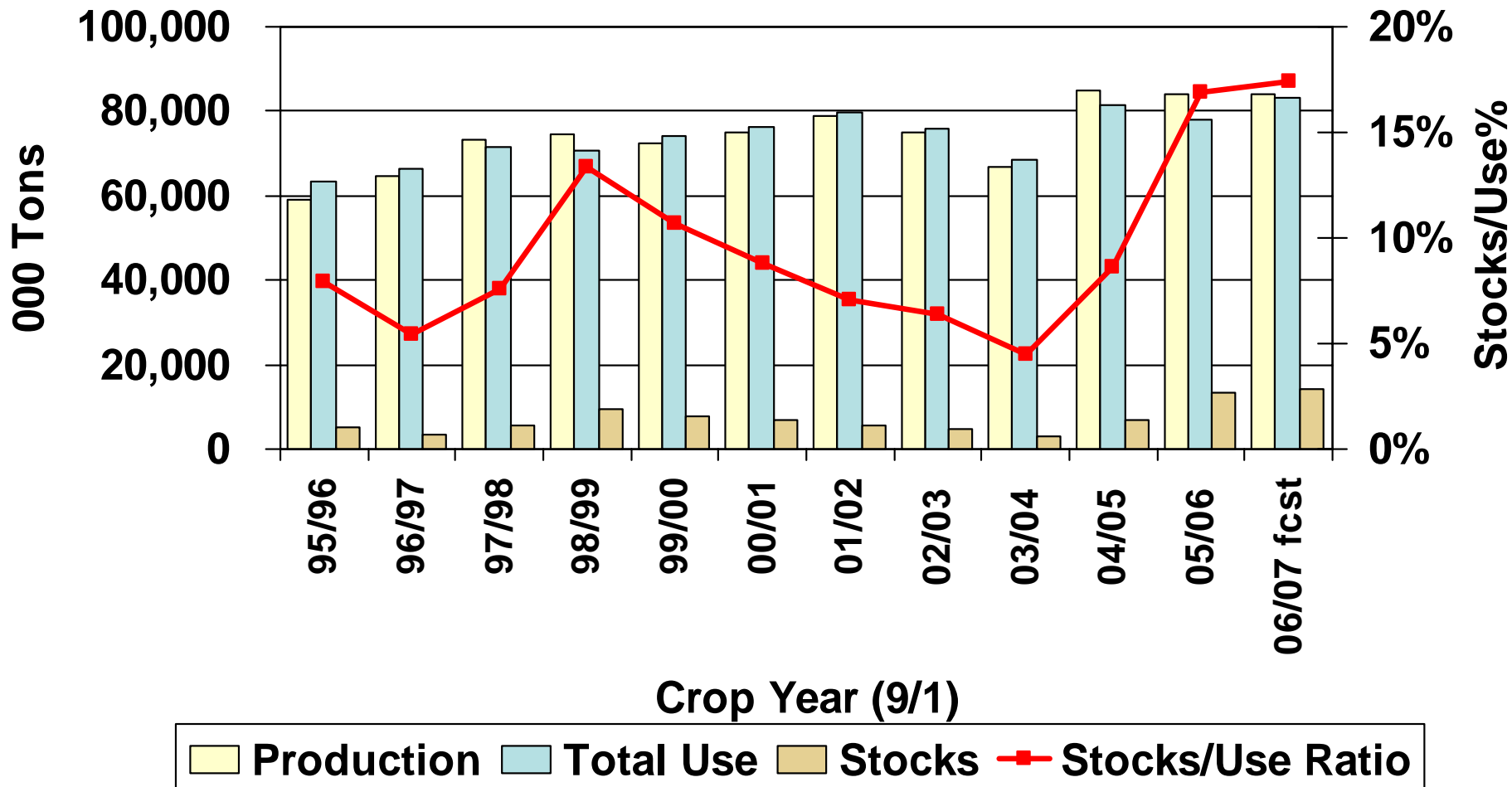


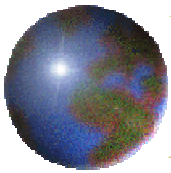
U.S. Soybean Yields and Trend



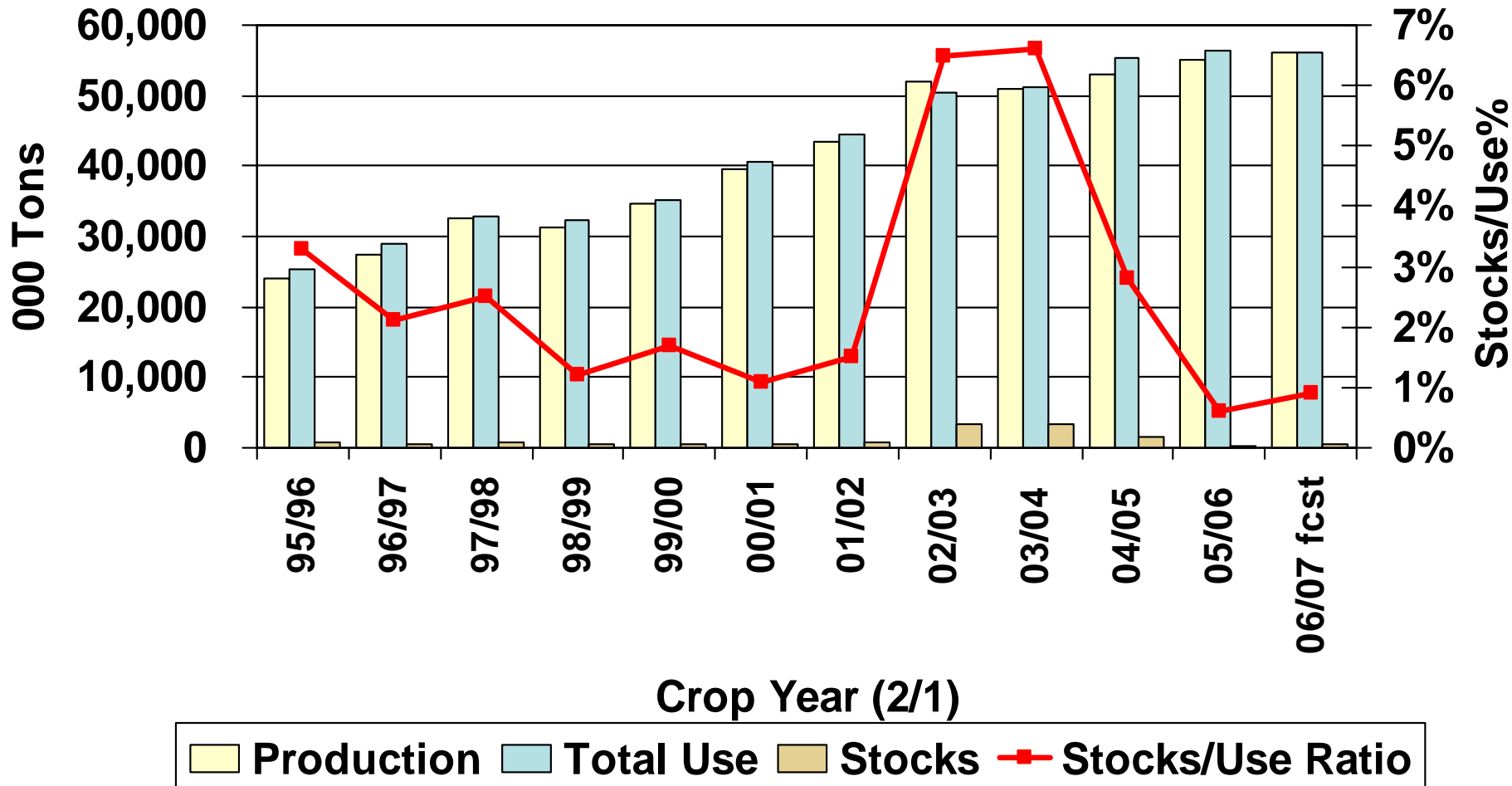


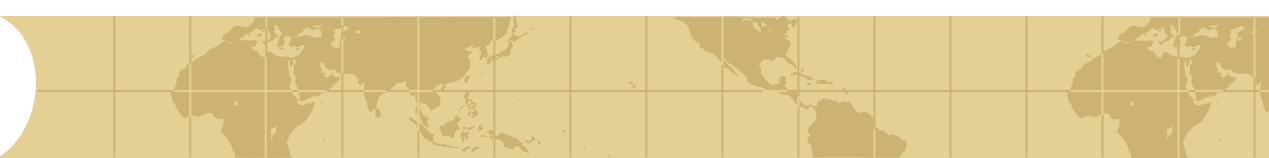
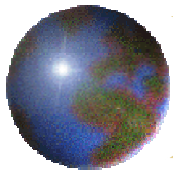
U.S. Soybean Production, Use, Stocks, Stocks/Use Ratio





Brazil Soybean Production, Use, Stocks, Stocks/Use Ratio

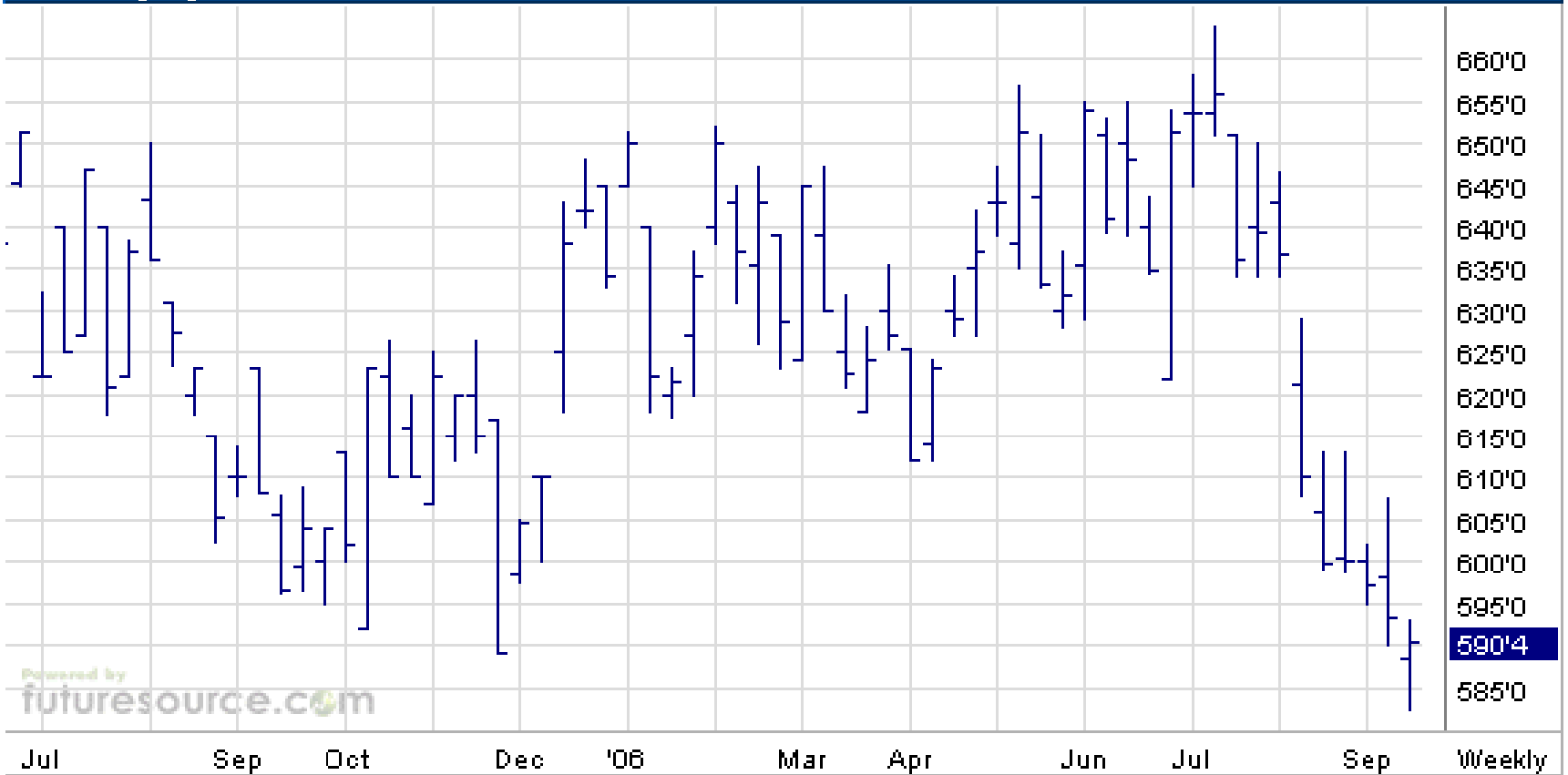


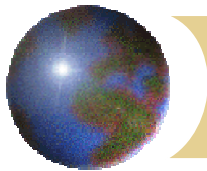


July 2007 Soybean Futures

¢/Bushel

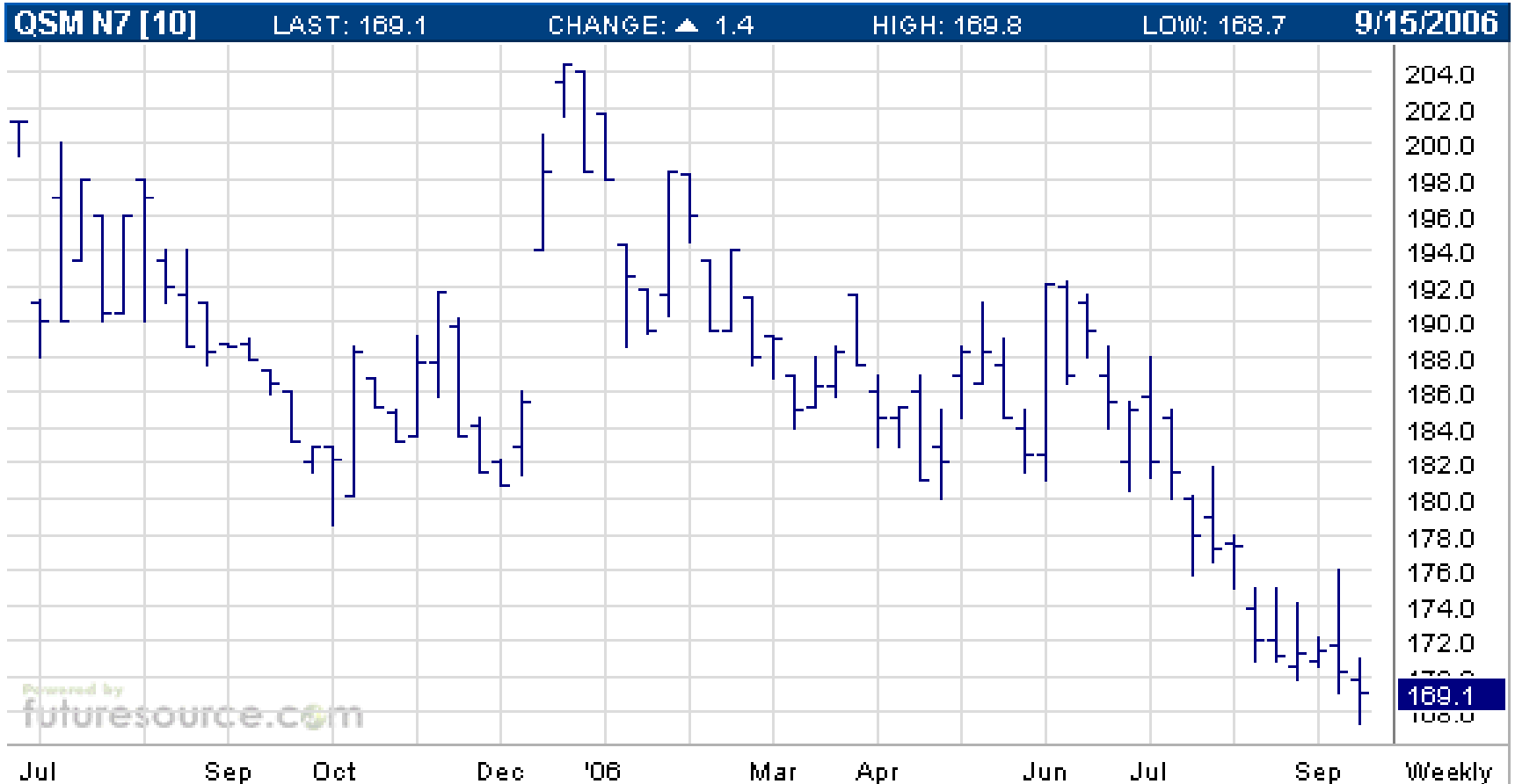
QBS N7 [10] LAST: 590'4 CHANGE: 8'0 HIGH: 591'4 LOW: 589'0 9/15/2006

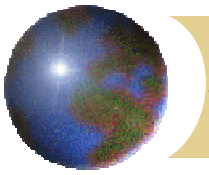




July 2007 Soymeal Futures

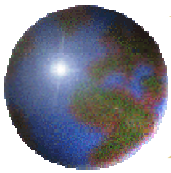
48% Protein, \$/Short Ton



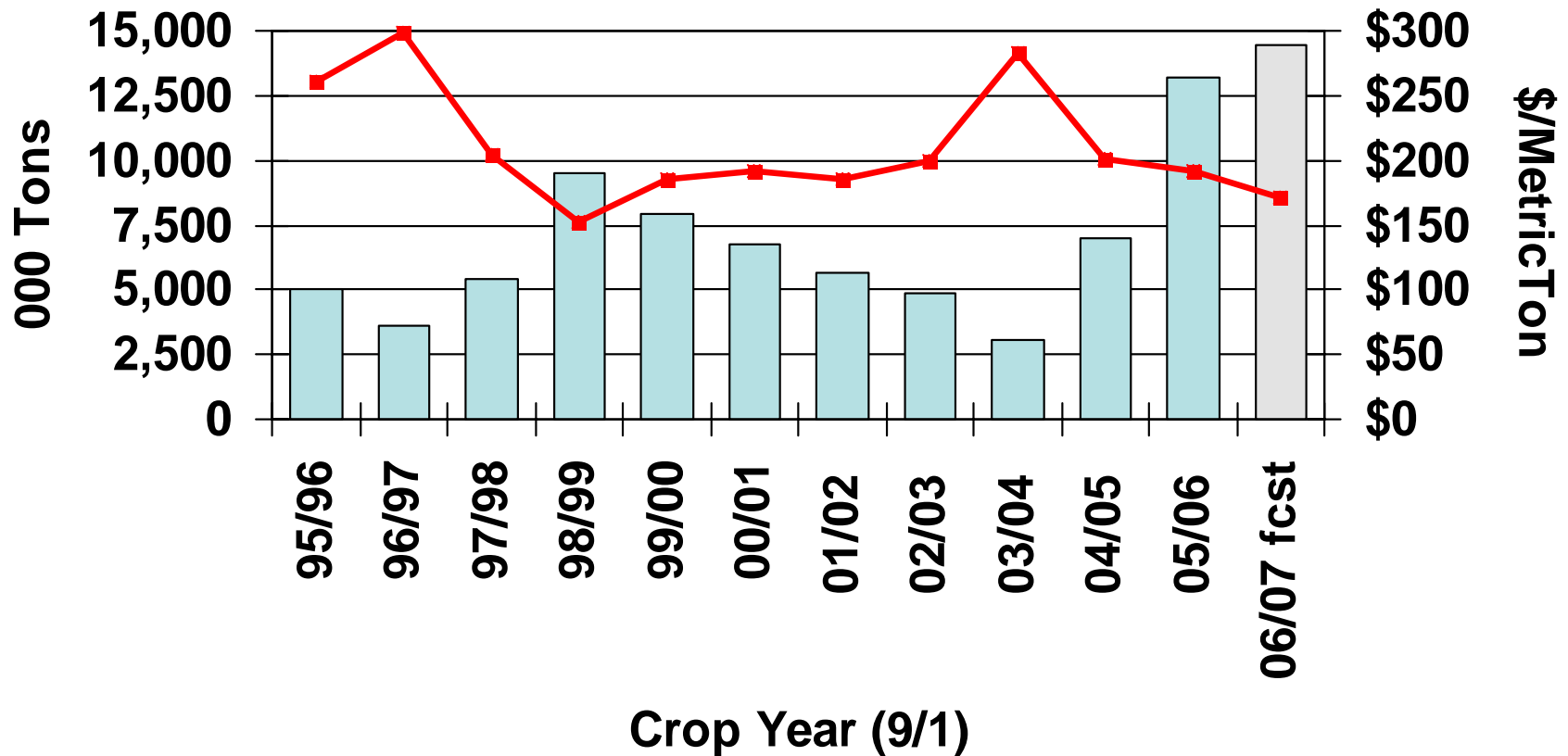


2006/07 Soymeal Price Prospects

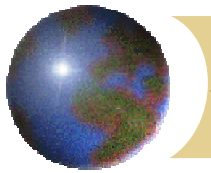
- ❖ U.S. soybean stocks at the end of the '06/07 crop year are forecast at 14.4 mill. tons
- ❖ This is a high stocks level, and is a significant buffer against weather problems
- ❖ Large soybean stocks will hang over the entire meal/oil complex through 2007
- ❖ We can expect to see steady, or slightly higher, meal prices through next summer



U.S. Soybean Ending Stocks & Soybean Meal Average Price



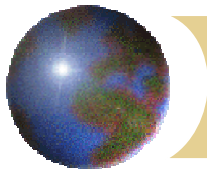
Stocks 48% Meal, Decatur IL



Detailed Global Oilseeds Supply and Use

(000 Metric Tons)

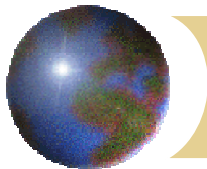
<i>Year (9/1)</i>	<i>Production</i>	<i>Total Supply</i>	<i>Trade</i>	<i>Use</i>	<i>Ending Stocks</i>
2004/05	381.3	425.2	74.7	302.2	56.3
2005/06 (Est.)	389.0	445.3	77.5	317.9	60.8
2006/07 (Fcst.)	386.5	447.3	82.2	324.6	58.2



Detailed U.S. Soybean Supply and Use

(000 Metric Tons)

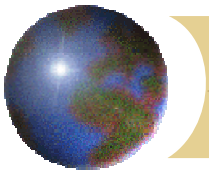
	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Area Harvested (1000 HA)	29,303	29,532	29,339	29,330	29,930	28,879	29,921
Beginning Stocks (1000 MT)	7,897	6,743	5,663	4,853	3,059	6,960	13,186
Production (1000 MT)	75,055	78,672	75,010	66,778	85,013	83,999	84,177
MY Imports (1000 MT)	97	63	127	151	152	109	109
Total Supply (1000 MT)	83,049	85,478	80,800	71,782	88,224	91,068	97,472
MY Exports (1000 MT)	27,103	28,948	28,423	24,128	29,860	25,719	30,618
Crush (1000 MT)	44,625	46,259	43,948	41,632	46,160	47,355	48,036
Feed/Waste Dom. Cons. (1000 MT)	4,578	4,608	3,576	2,963	5,244	4,808	4,383
Total Dom. Cons. (1000 MT)	49,203	50,867	47,524	44,595	51,404	52,163	52,419
Total Cons. (1000 MT)	76,306	79,815	75,947	68,723	81,264	77,882	83,037
Ending Stocks (1000 MT)	6,743	5,663	4,853	3,059	6,960	13,186	14,435
Stocks/Use Ratio	8.8%	7.1%	6.4%	4.5%	8.6%	16.9%	17.4%



Detailed Brazil Soybean Supply and Use

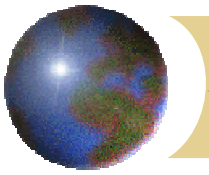
(000 Metric Tons)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Beginning Stocks (1000 MT)	616	457	681	3,298	3,400	1,535	322
Production (1000 MT)	39,500	43,500	52,000	51,000	53,000	55,000	56,000
MY Imports (1000 MT)	854	1,100	1,124	364	408	173	182
Total Supply (1000 MT)	40,970	45,057	53,805	54,662	56,808	56,708	56,504
MY Exports (1000 MT)	15,521	16,074	19,987	19,256	22,798	26,600	26,700
Crush (1000 MT)	22,773	25,843	27,796	29,172	29,730	27,450	27,300
Feed/Waste Dom. Cons. (1000 MT)	2,219	2,459	2,724	2,834	2,745	2,336	2,024
Total Dom. Cons. (1000 MT)	24,992	28,302	30,520	32,006	32,475	29,786	29,324
Total Cons. (1000 MT)	40,513	44,376	50,507	51,262	55,273	56,386	56,024
Ending Stocks (1000 MT)	457	681	3,298	3,400	1,535	322	480
Stocks/Use Ratio	1.1%	1.5%	6.5%	6.6%	2.8%	0.6%	0.9%



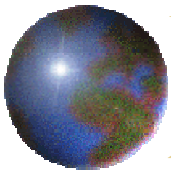
Soybean Conclusions

- ❊ Adequate U.S. buffer stocks will be available for minor weather problems next summer (2007)
- ❊ Longer term outlook is for less stable prices, shifts in production
 - ❑ Increasing corn demand in the U.S. will shift acres to corn from soybeans
 - ❑ This will open more opportunities for South American and EU oilseed production

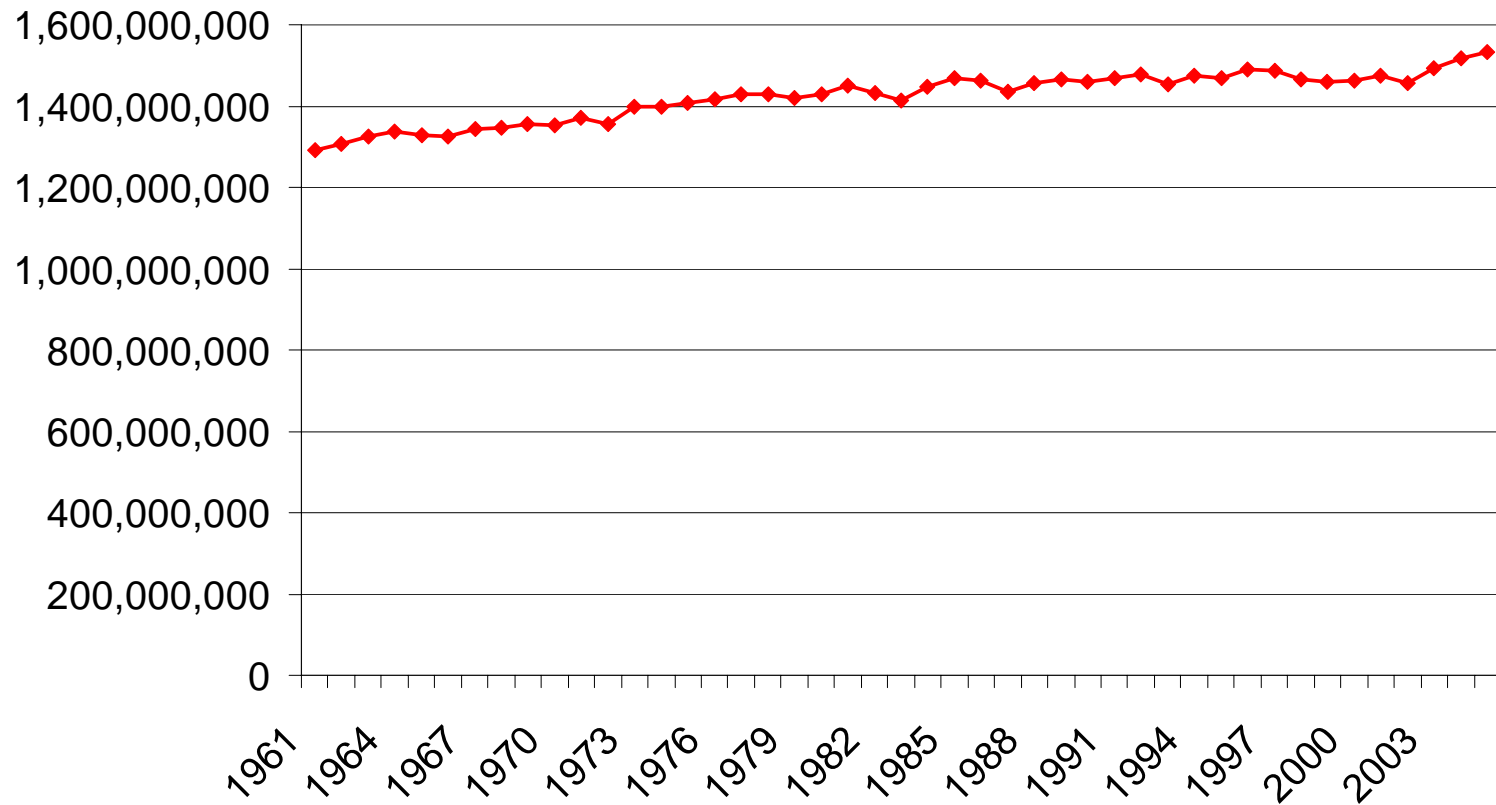


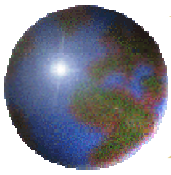
Longer Term Global Issues

- ❖ Global crop area has peaked at 1.5 billion hectares
- ❖ Population and incomes continue to increase
- ❖ Meat demand will expand steadily for at least the next 50 years
- ❖ The only solution is to continue to increase feed crop yields in line with demand
- ❖ Alternative is much higher feed and meat prices, and reduced meat production growth



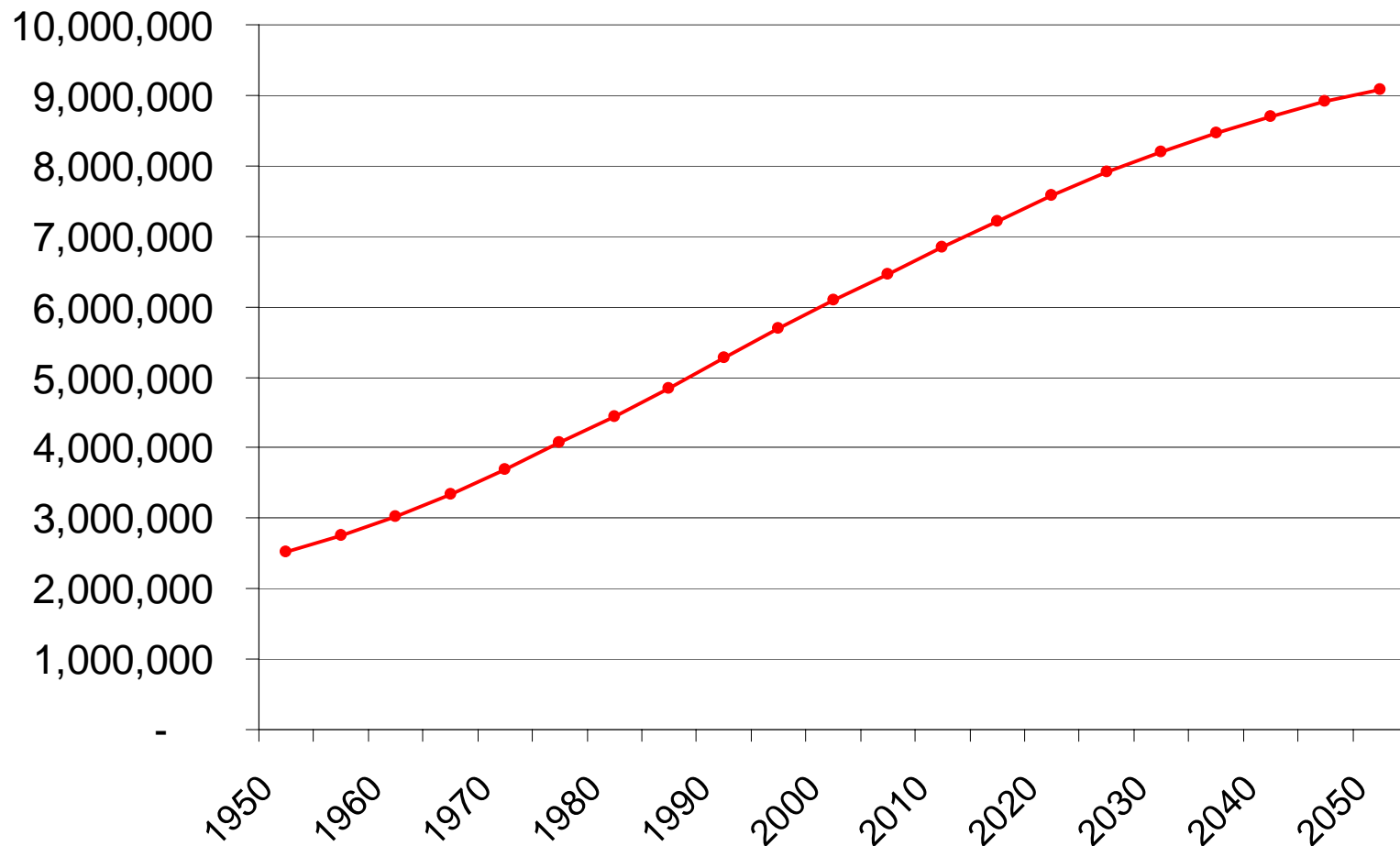
Total World Crop Hectares

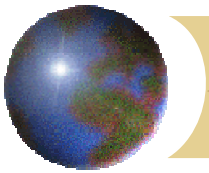




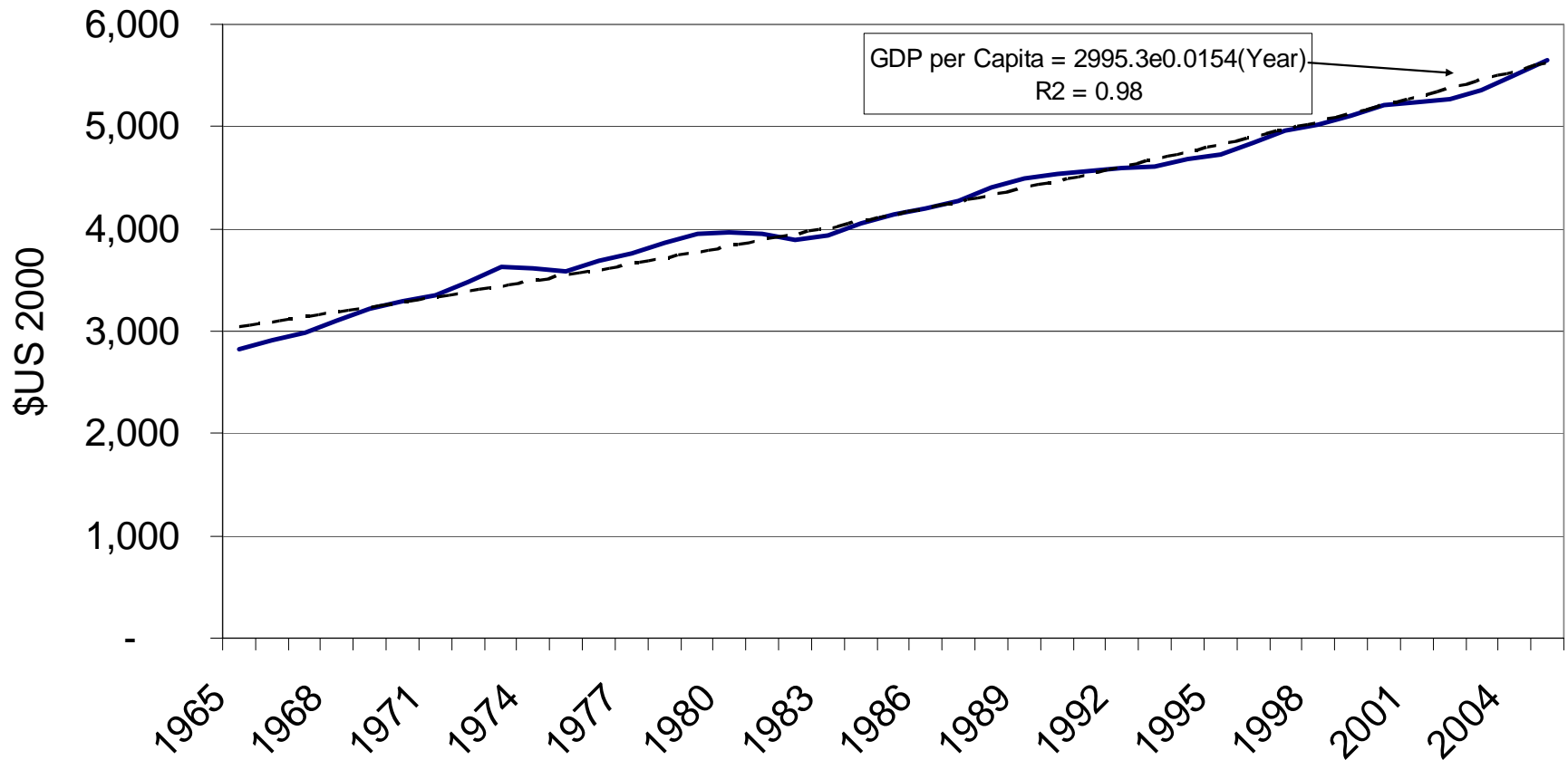
Global Population (000)

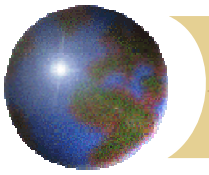
U.N. Medium Estimate, 2005-2050





Per Capita Global GDP \$US 2000





Total and Per Capita Meat Production 2006-2050 Projected

