

# **Comments on “Bioenergy – Agricultural Issues and Outlook” Report**

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# Report Fails to Include:

- **More Discussions on Food, Feed, and Fuel issue**
- **Biofuel production effects:**
  - **Economic**
  - **Environmental**
  - **Cropland and Water Resources**
  - **Local Infrastructure**

# Emerging Global Biofuel Industry

- **Investment in biofuel technology has increased from \$5 billions in 1995 to \$38 billions in 2005 and projected to increase to \$100 billions by 2010**

**Source: 2007 IDB Report, “ A Blueprint for Green Energy in America**



# Reasons for Expansion of Biofuel Industry

- **Concern over energy security led to direct industry subsidies**
- **Supportive policies such as blend mandates improved production incentives**
- **Added support came from concerns over global warming and greenhouse gas emissions**
- **Increased public and private investment, and swift new technology responses created an encouraging market outlook**

# **Economic Benefits of Biofuel Production for Agricultural Exporting Countries**

- **Increases commodity prices**
- **Creates jobs in rural areas**
- **Increases farm income**
- **Improves balance of trade**

# Environmental Concerns Of Biofuel Production

- **Soil erosions and compaction**
- **Nutrient leaching**
- **Water use for production of feedstock, salt and iron in plant water discharge, and water vapor from the plants' cooling towers**
- **Pre-harvest burning on sugarcane plantations**
- **Sugarcane-ethanol Vinasse**
- **Greenhouse gas emissions due to expansion of production, transportation, processing, fuel evaporation, and tail pipe emissions**

# **Report from Brazil on Sugarcane-ethanol:**

- **“Last harvest, over 2.5 million hectares of cane were burned, pumping about 750,000 tones of particulate materials into the atmosphere,”**

**Sao Paulo State Governor, Jose Serra**

**F.O. Licht's World Ethanol & Biofuels Report**

**Thursday June 7, 2007**



# Emerging Food, Feed, and Fuel Issues

- **Concern over increasing food and feed prices to produce biofuels is intensifying among processing industries (sugar in Brazil, corn and soybeans in U.S. and other emerging countries)**
- **Growing budget pressure in low income countries because of increase in costs of essential imports: food and fuel**
- **Weather variability and low stocks to use ratios for key staple commodities induce higher risk of commodity price volatility**



# Specific Issues in Latin Americas

- **Representative of 13 countries in Central and South America, CBI as well as Mexico said that they are facing more price risks now than ever seen in the past because of:**
  - **Volatile ocean freight rates**
  - **High local transportation rates**
  - **Growing volatility in commodity prices associated with ethanol and biodiesel production**

**Source, World Perspectives, Inc, June 5, 07**

**Risk management Conference, John Baize**



# Infrastructure Required for Expanding Biofuel Production

## Land resource base:

- Existing cropland (Brazil)
- Idled cropland (40 million acre in U.S.)
- Fallow land and cropland pasture
- Pasture and rangeland (60 million acre in U.S.)
- **Water** (may be a constraint in U.S.)
- **Capital:**
  - Farm equipments
  - Farm machinery, harvester, combine
  - Other farm inputs, seed, fertilizers, chemicals, fuels

# Infrastructure Required for Expanding Biofuels--Continued

## **Feedstock storage and handling:**

- **Satellite storage locations**
- **Mode of transportation**
- **Availability of roads, water ways, rail road tracks**

## **• Processing plants:**

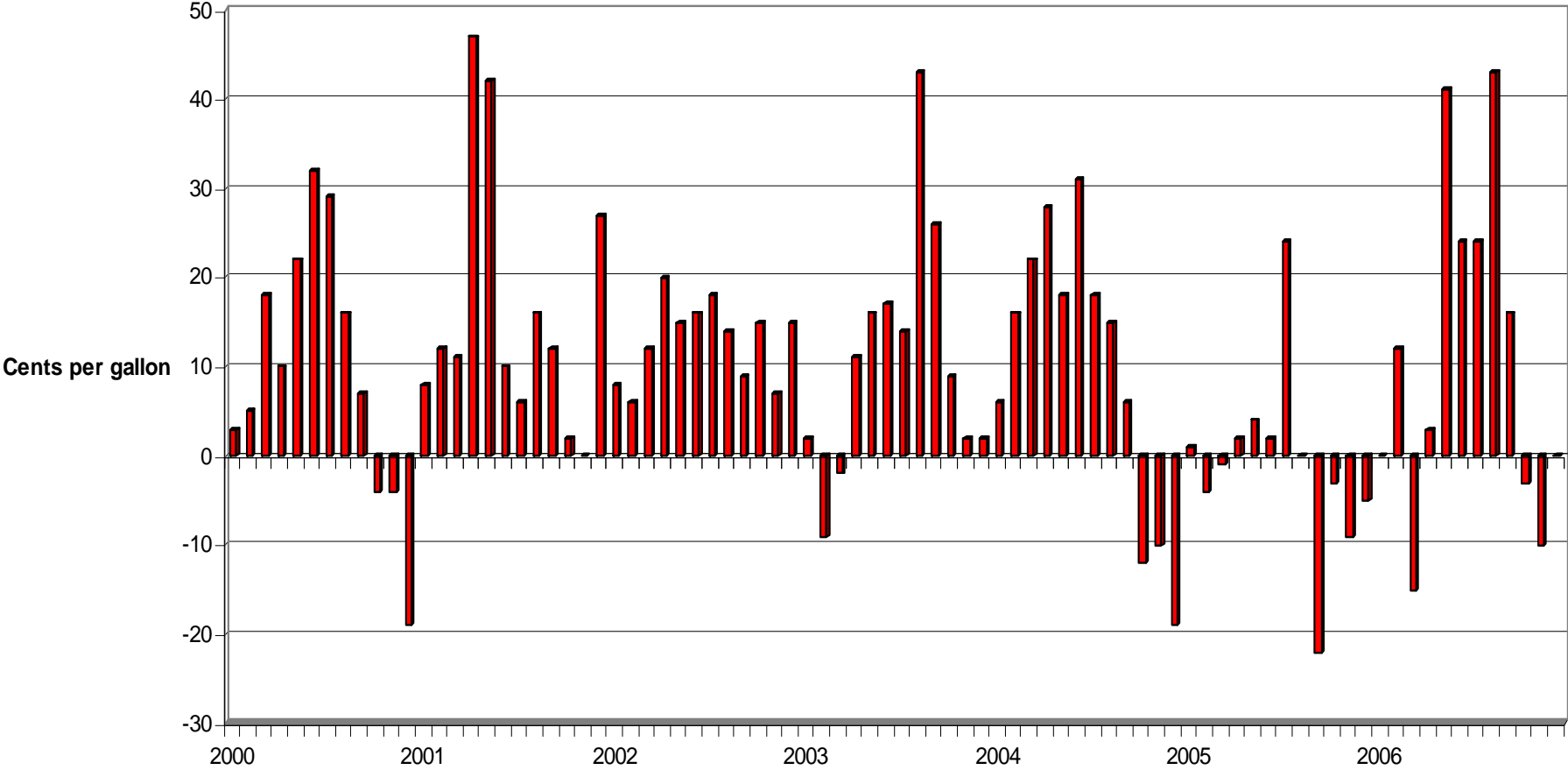
- **Capital**
- **Plant capacity**
- **Feedstock availability and crop density**

# **Infrastructure Required for Expanding Biofuels--Continued**

## **Marketing:**

- Biofuel transportation and distribution, (pipelines, trucks, unit trains, barges)**
- Receiving terminals and storage**
- Biofuel use, additives and fuels**
- Higher blends and bio-diesel pumps**
- Flexible fuel vehicles**

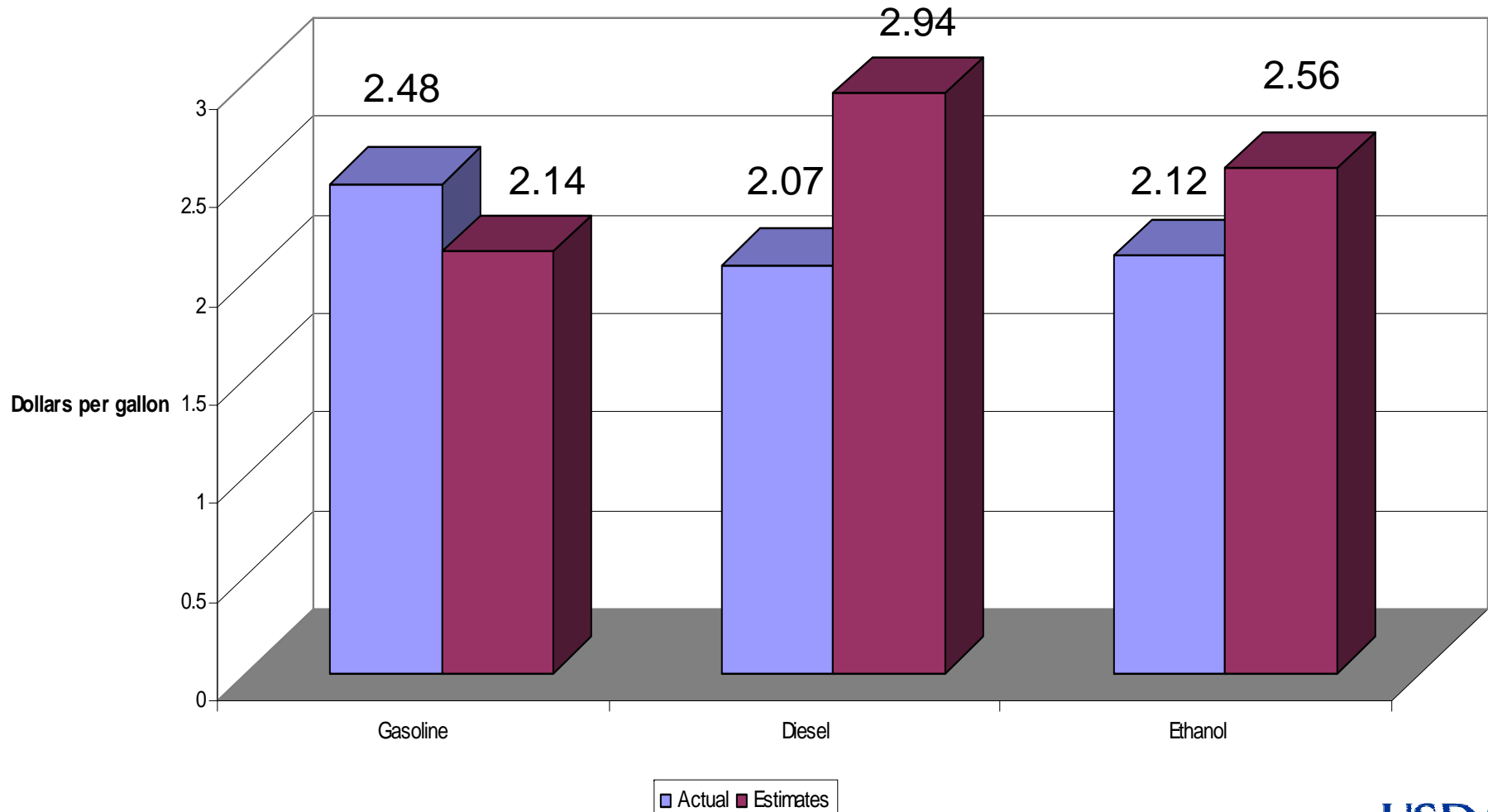
# Gasoline Premium Price to Diesel Fuel



Source: The Wall Street Journal



# Actual and Estimated Prices of Gasoline, Diesel Fuel and Ethanol (WTI = \$65.97/barrel)



Sources: The Wall Street Journal, cash prices, June 7, 2007 and Ethanol & Biodiesel News

