

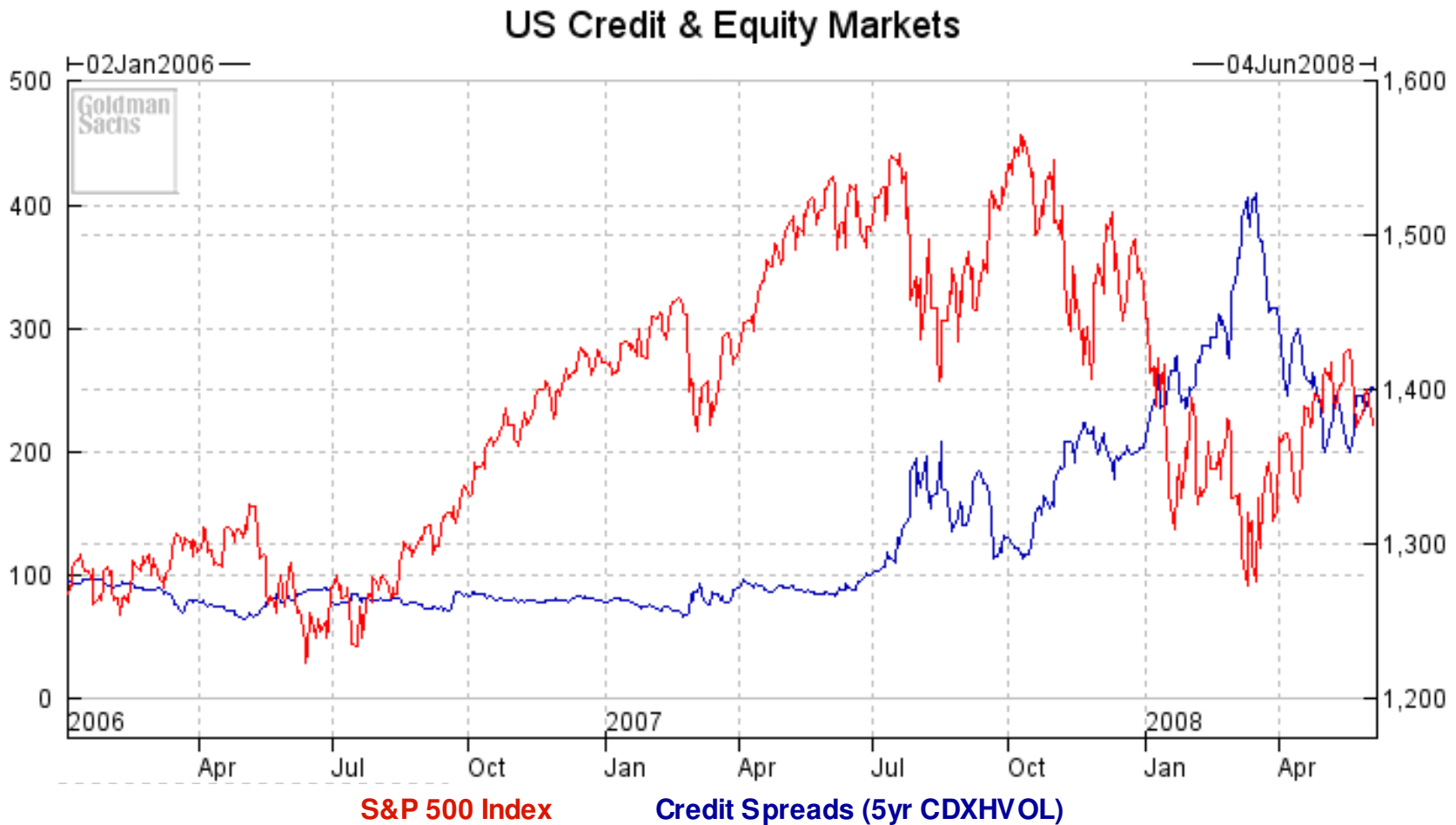
# Current Market Conditions Impact on Jatropha Feasibility

JatrophaWorld Miami 2008

William Grathwohl



# Overall Market Conditions are Difficult...

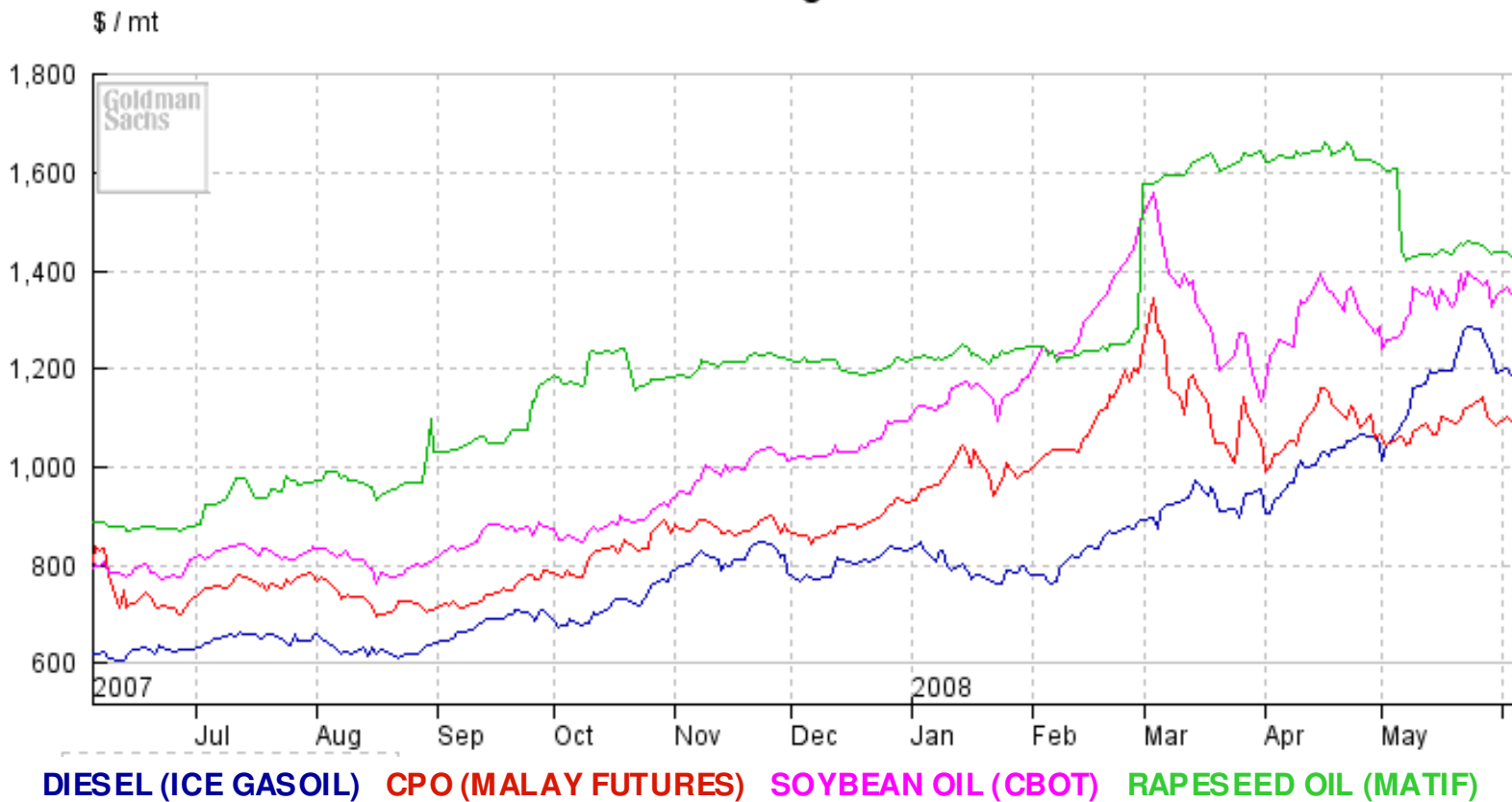


Source: Goldman Sachs Group and Reuters



# ...but Conditions for Jatropha are Attractive

Diesel and Vegoil Prices



Source: Goldman Sachs Group and Reuters



# Will Conditions Remain Attractive?

## • Demand Continues to Grow

- Emerging countries demand more food & fuel.
- According to IAE:
  - By 2010 China overtake the US to become the world's largest energy consumer
  - By 2030 China's energy demand will double

## • Supply is Limited

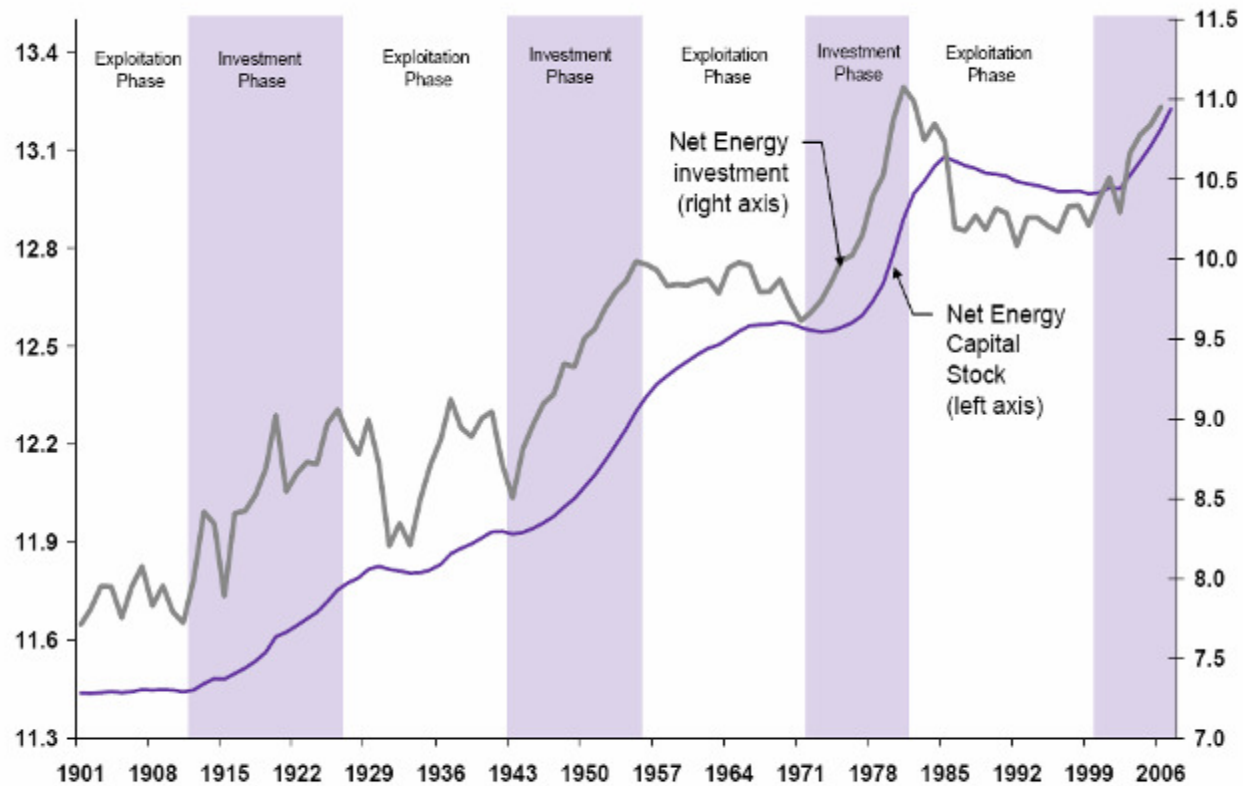
- Energy investment cycle is very long
- More oil may not be available
- Biofuels are not yet impacting the market

## • Prices Could Remain Relatively High

- Short term prices difficult to predict
- Intermediate term prices unlikely to go back to the old days
- In the long term additional supply will be created



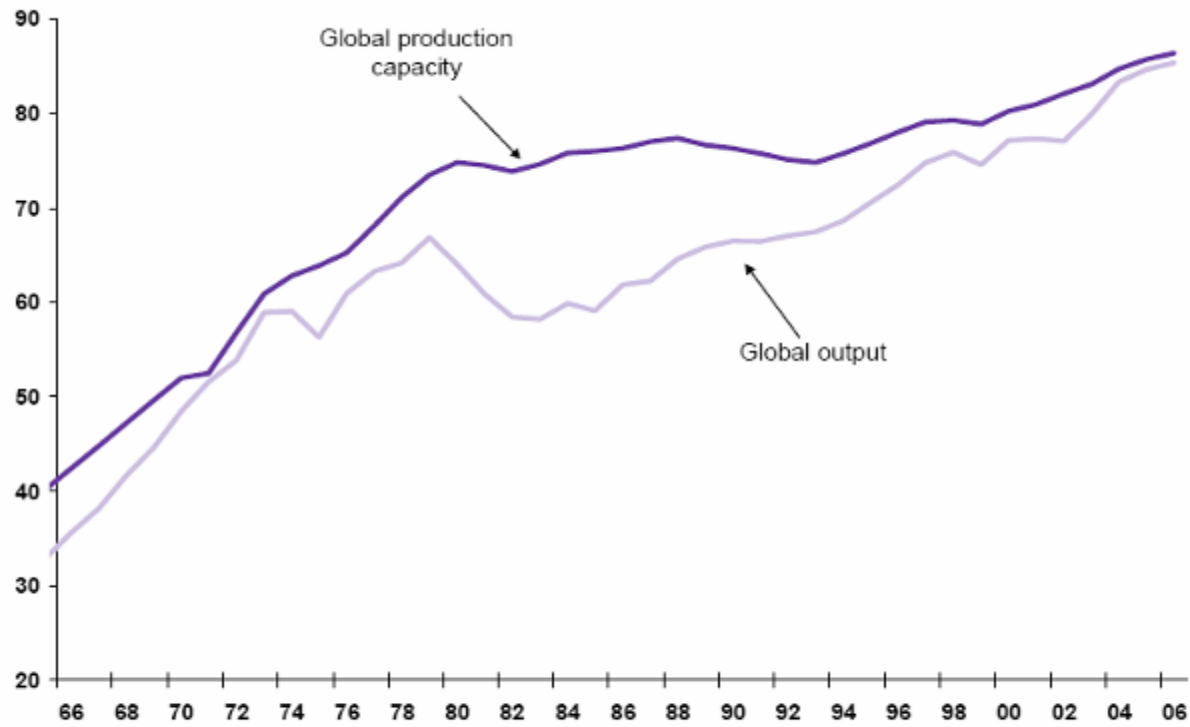
# Energy Investment Cycle is Very Long



Source: US Bureau of Economic Analysis and Goldman Sachs Commodities Research.



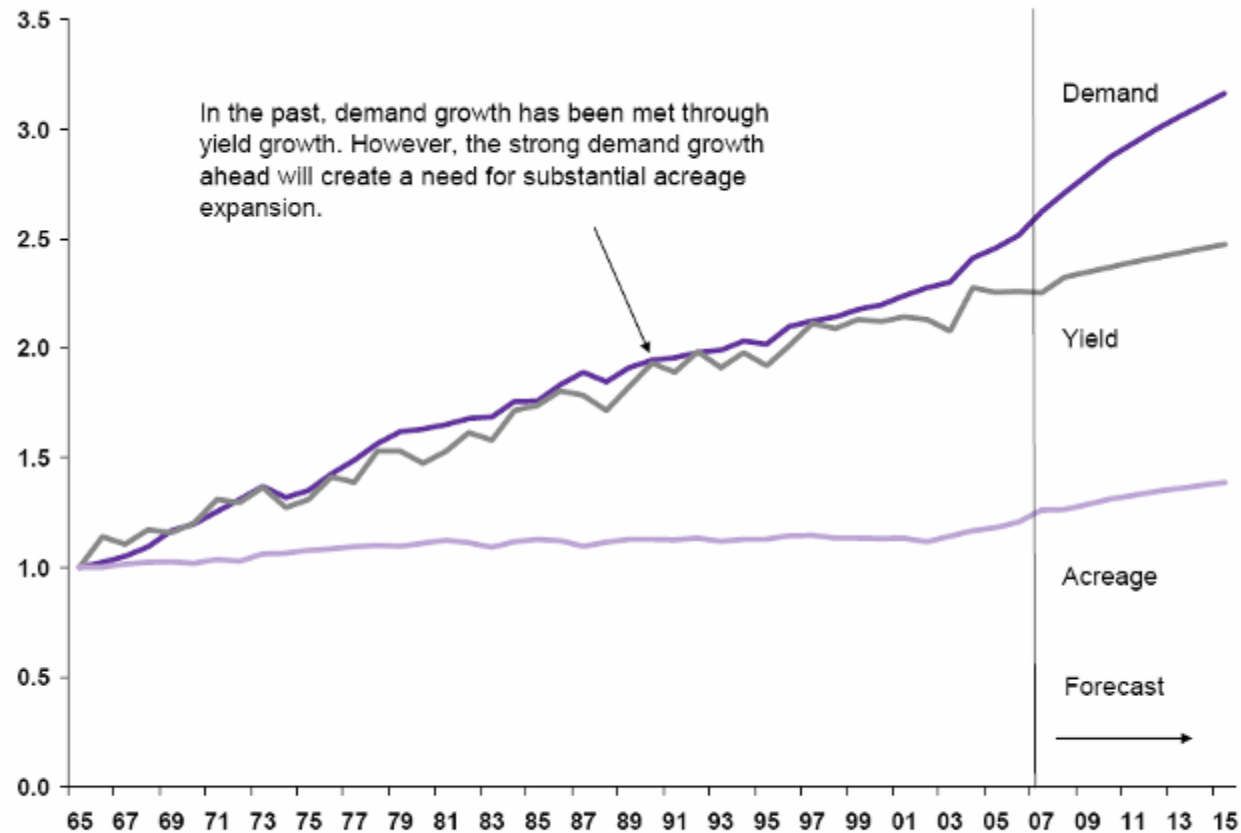
# Oil Production is Operating at Capacity



Source: International Energy Agency (IEA), DOE and Goldman Sachs Commodities Research.



## Agricultural Capacity Has to Come from Additional Acreage

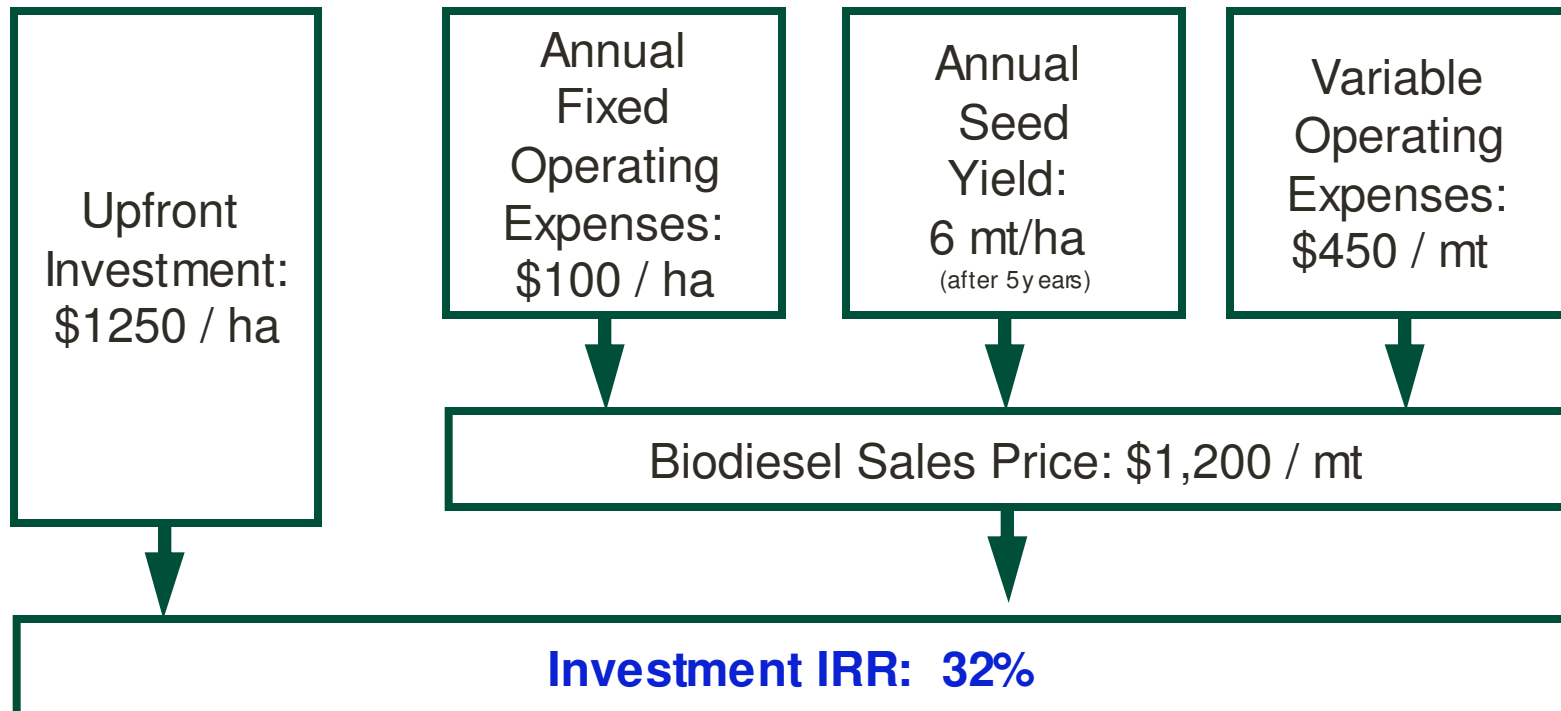


Source: US Department of Agriculture (USDA) and Goldman Sachs Commodities Research.



# What Does this Mean for Jatropha?

## Example Simplified Plantation Business Plan:





# It Also Means Yield Doesn't Matter

