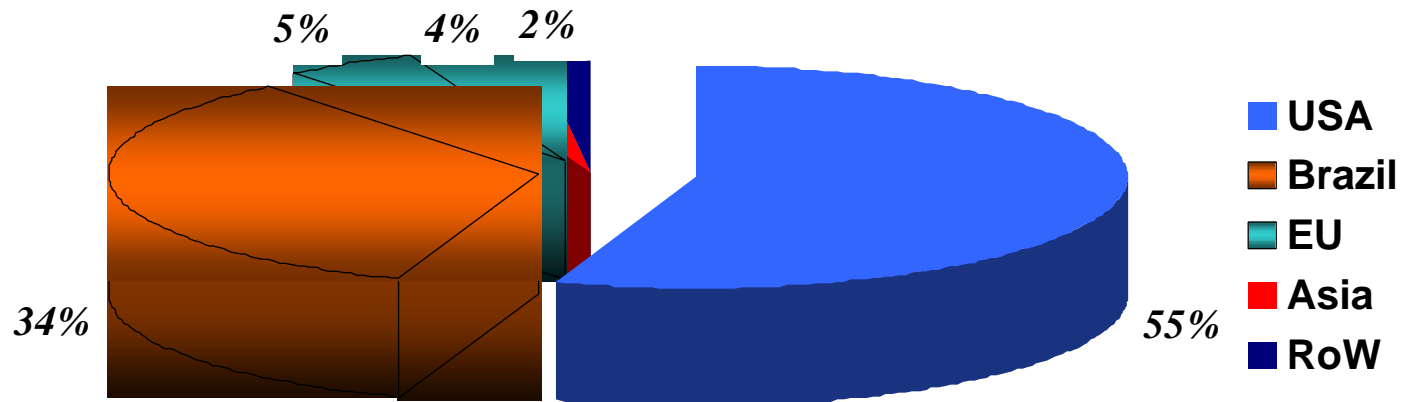


# Ethanol Trading Flow in East and South-East Asia

May 12, 2010, Nara, Japan

Shigeru Takemura  
Ginga Petroleum (S) Pte Ltd  
[www.ginga.com.sg](http://www.ginga.com.sg)

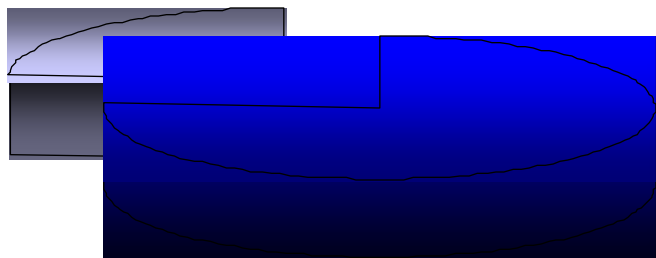
# *Fuel Ethanol Production in 2009*



**73 billion liter**

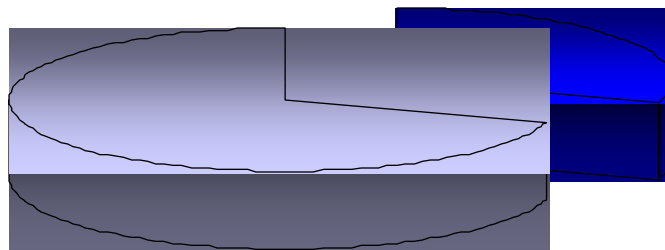
# *Ethanol Usage: World VS East & SE Asia*

*World*



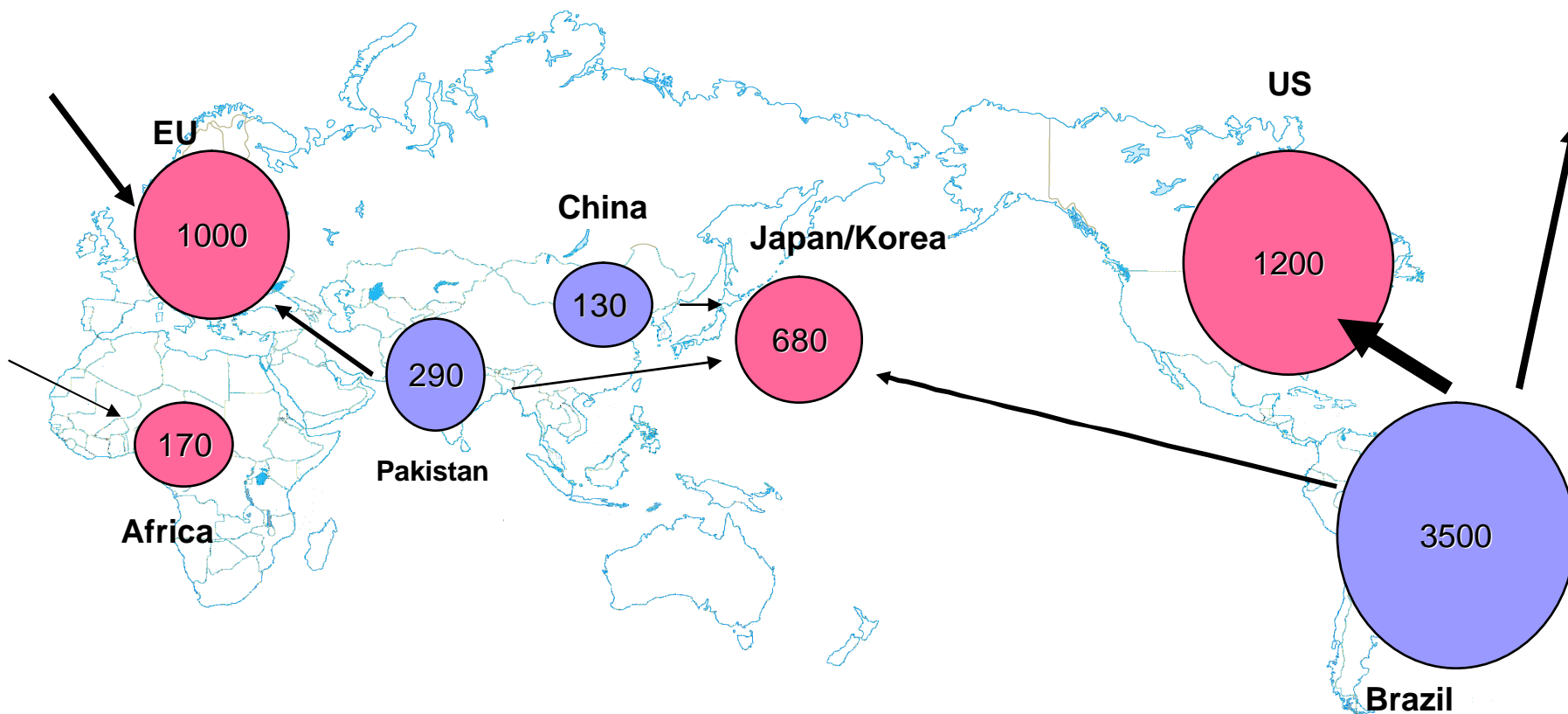
*Fuel 76%*

*East and SE Asia*

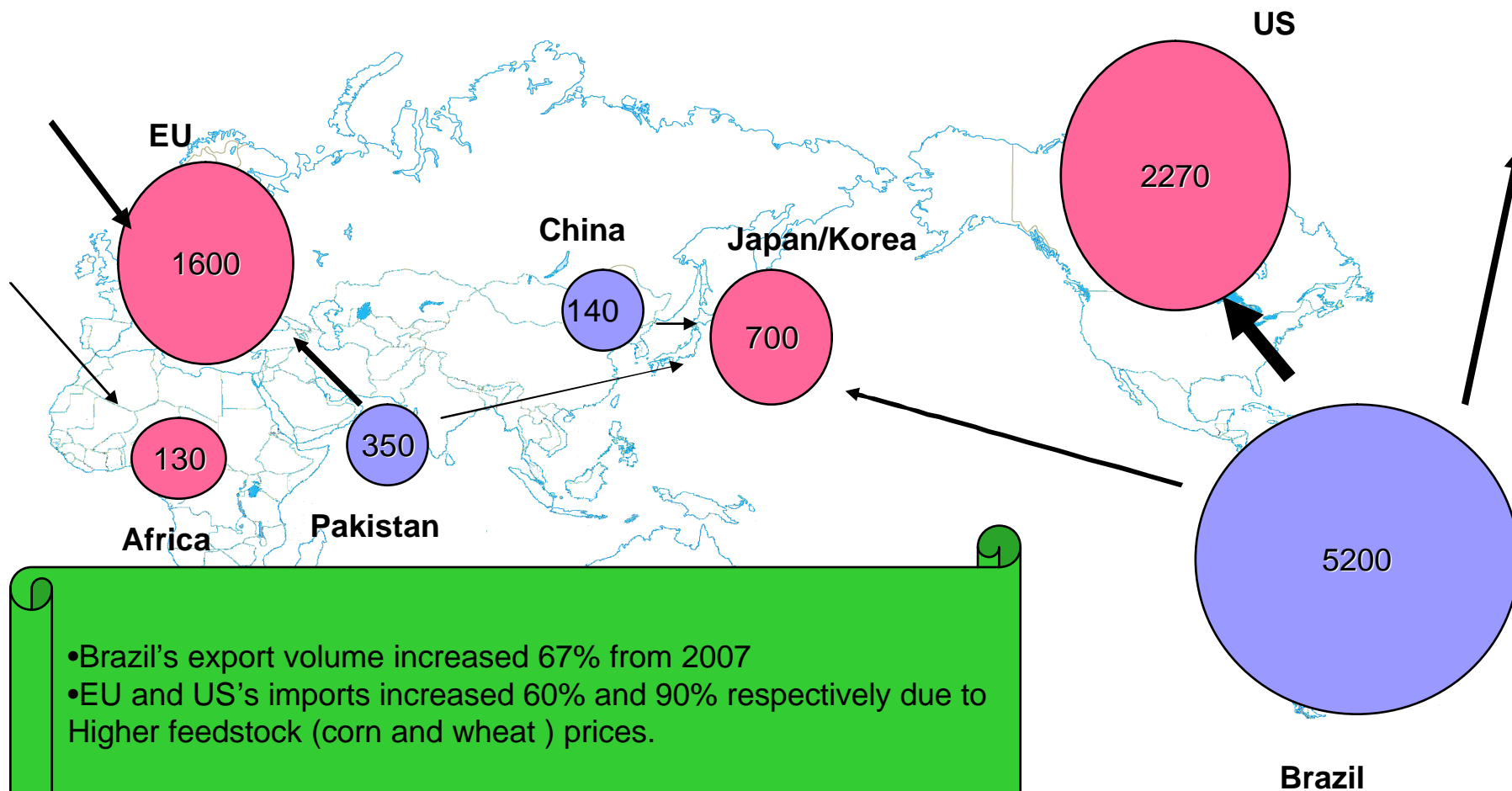


*Industrial & Beverage 70%*

# *Estimated Trade Flow: 2007 (1,000 cbm)*

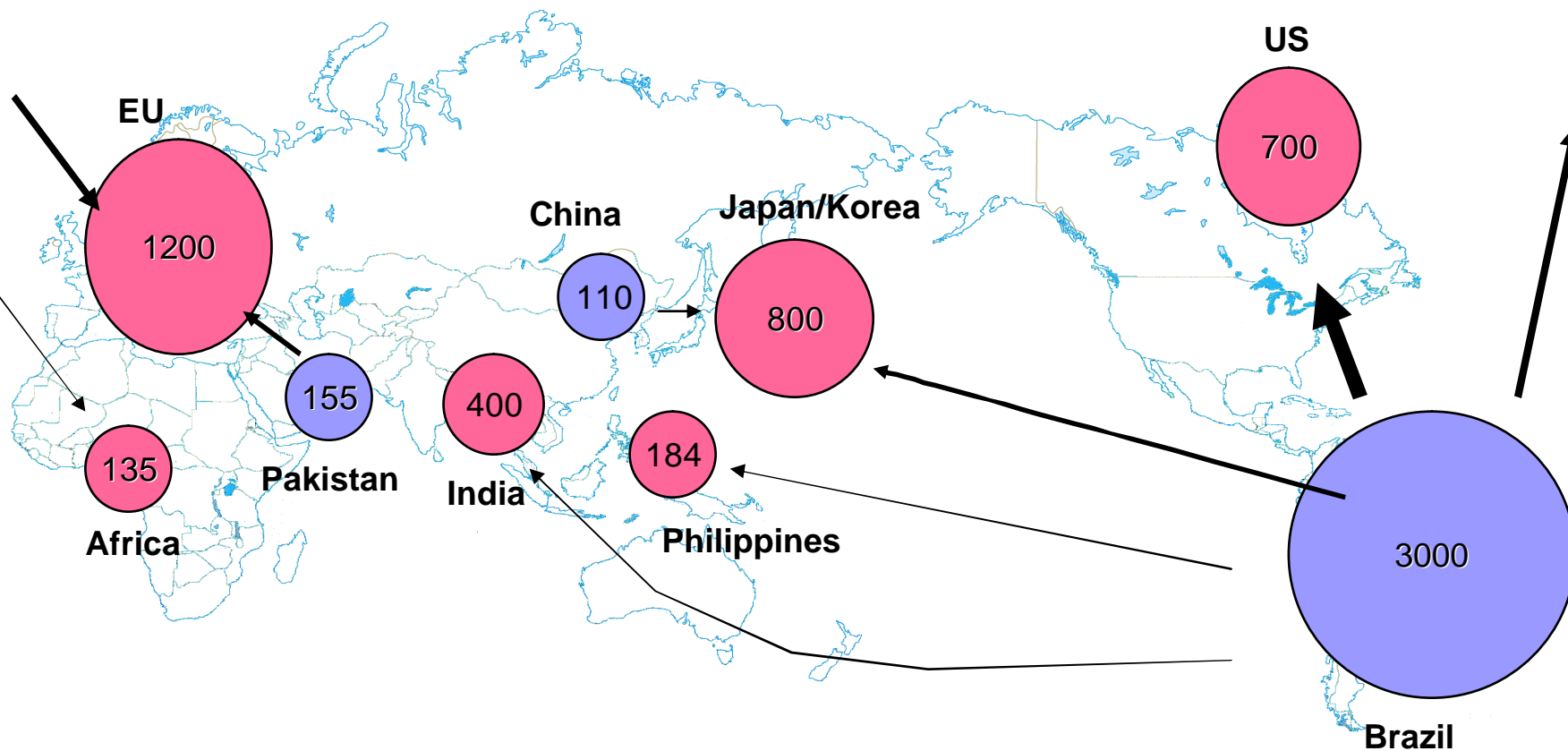


# Estimated Trade Flow: 2008 (1,000 cbm)

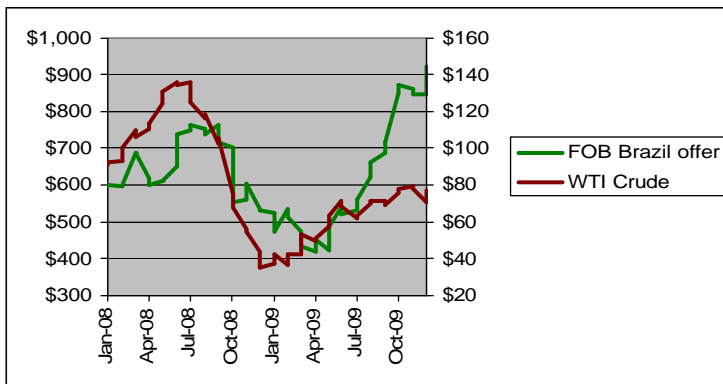
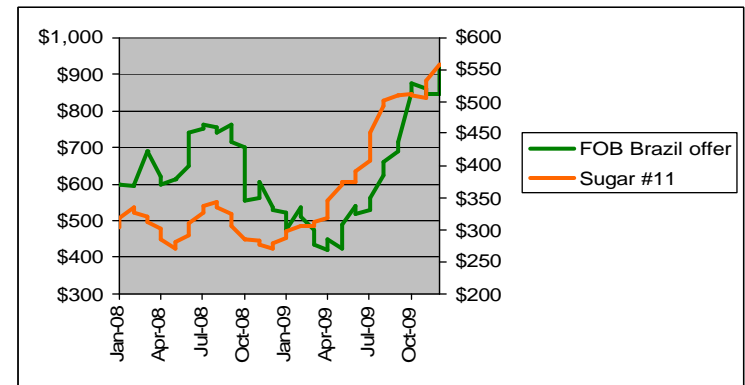
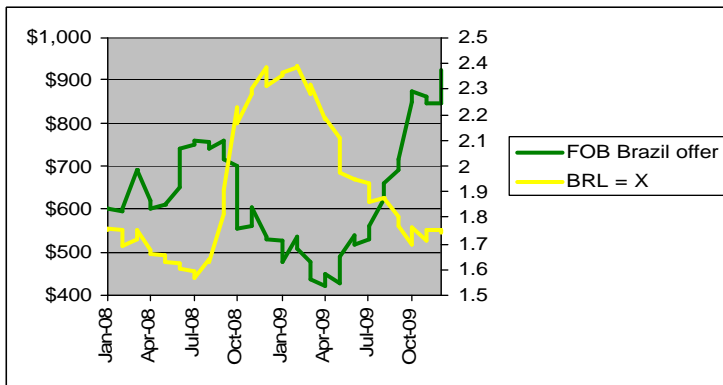


- Brazil's export volume increased 67% from 2007
- EU and US's imports increased 60% and 90% respectively due to Higher feedstock (corn and wheat ) prices.

# *Estimated Trade Flow: 2009 (1,000 cbm)*



# Other commodities to watch



## Correlations

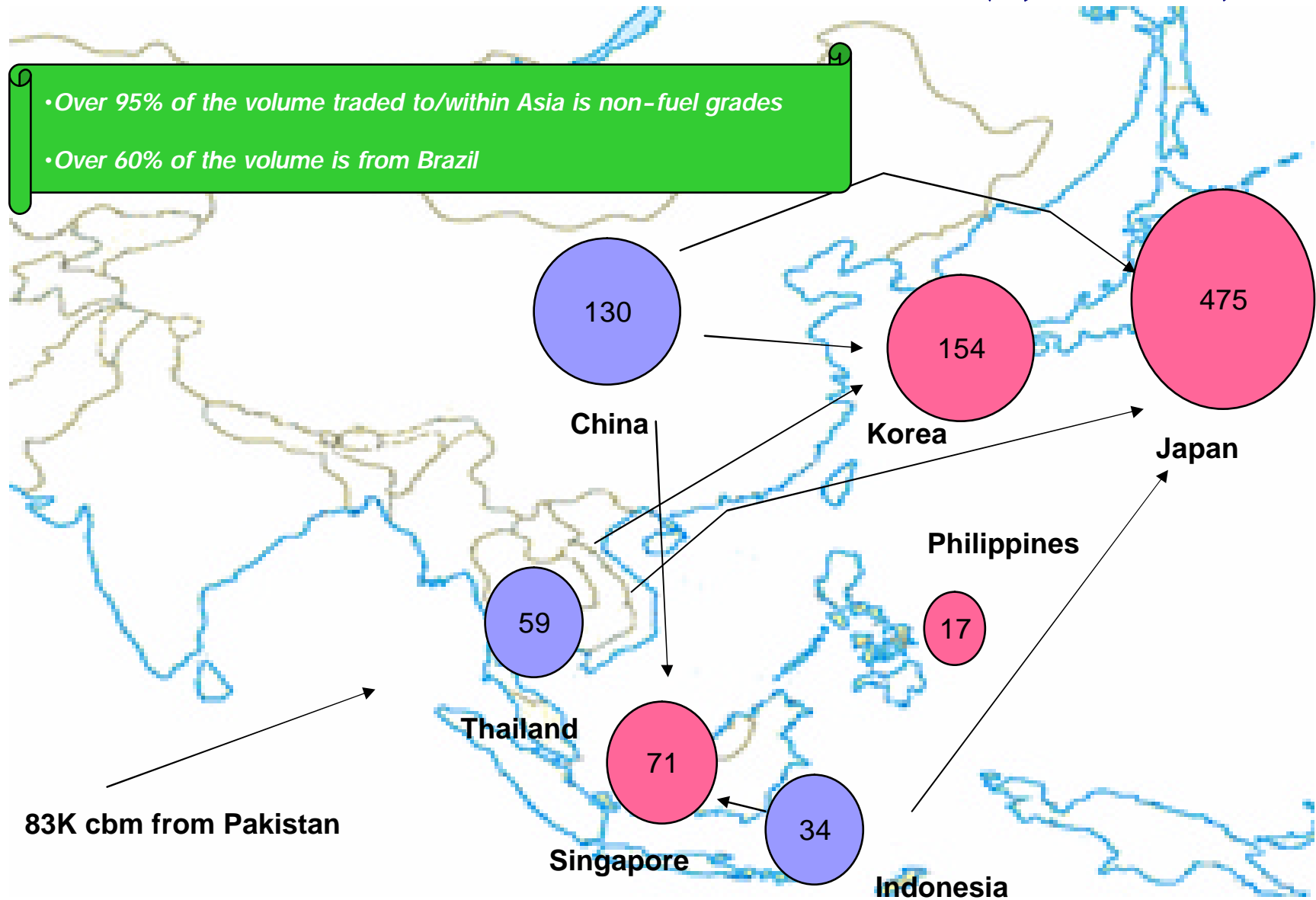
FOB Brazil : Brazilian Real = -0.66

FOB Brazil : Sugar #11 = 0.56

FOB Brazil : WTI Crude = 0.49

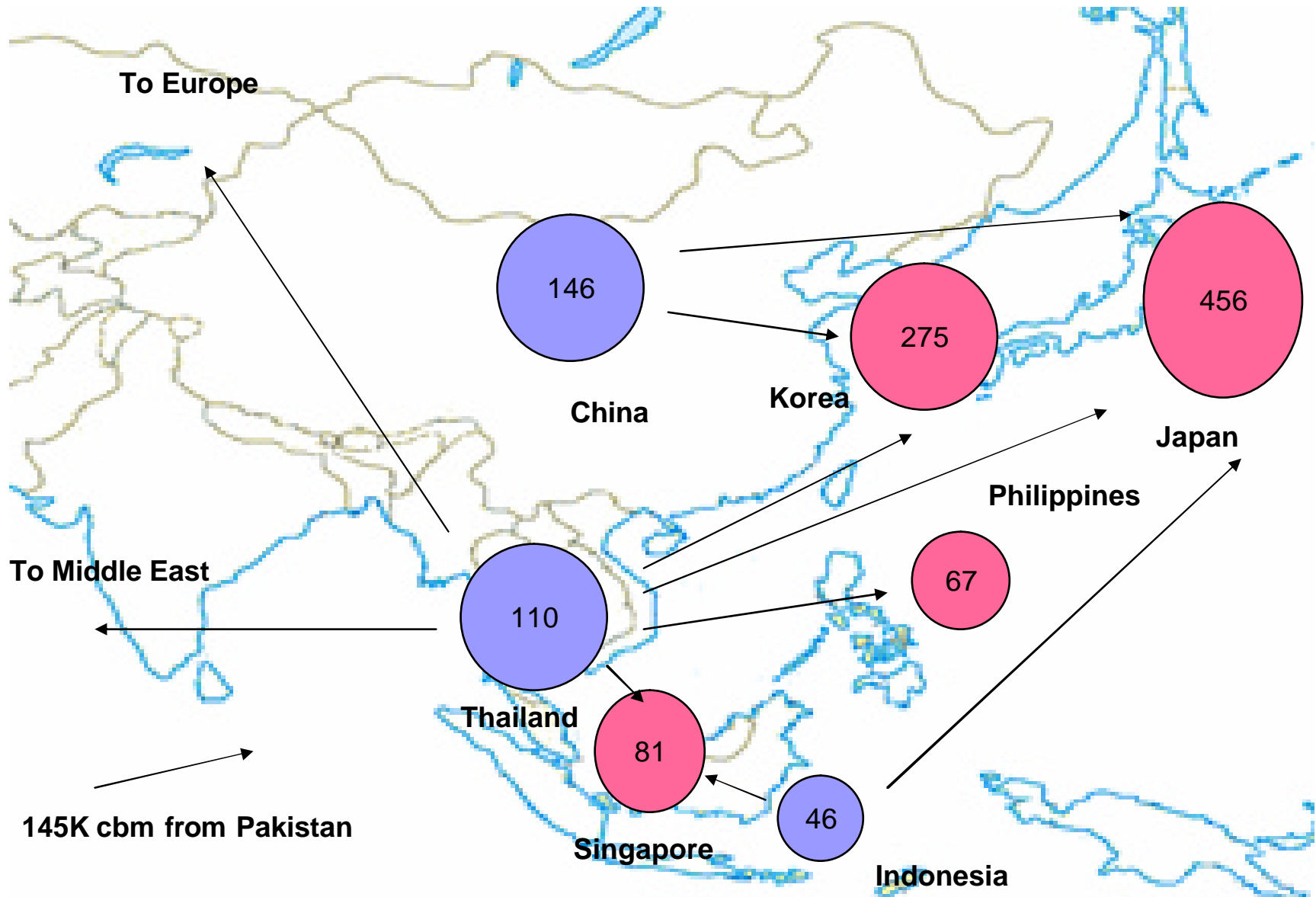
# Ethanol Trade Flow in E&SE Asia 2007 (1,000cbm)

- Over 95% of the volume traded to/within Asia is non-fuel grades
- Over 60% of the volume is from Brazil

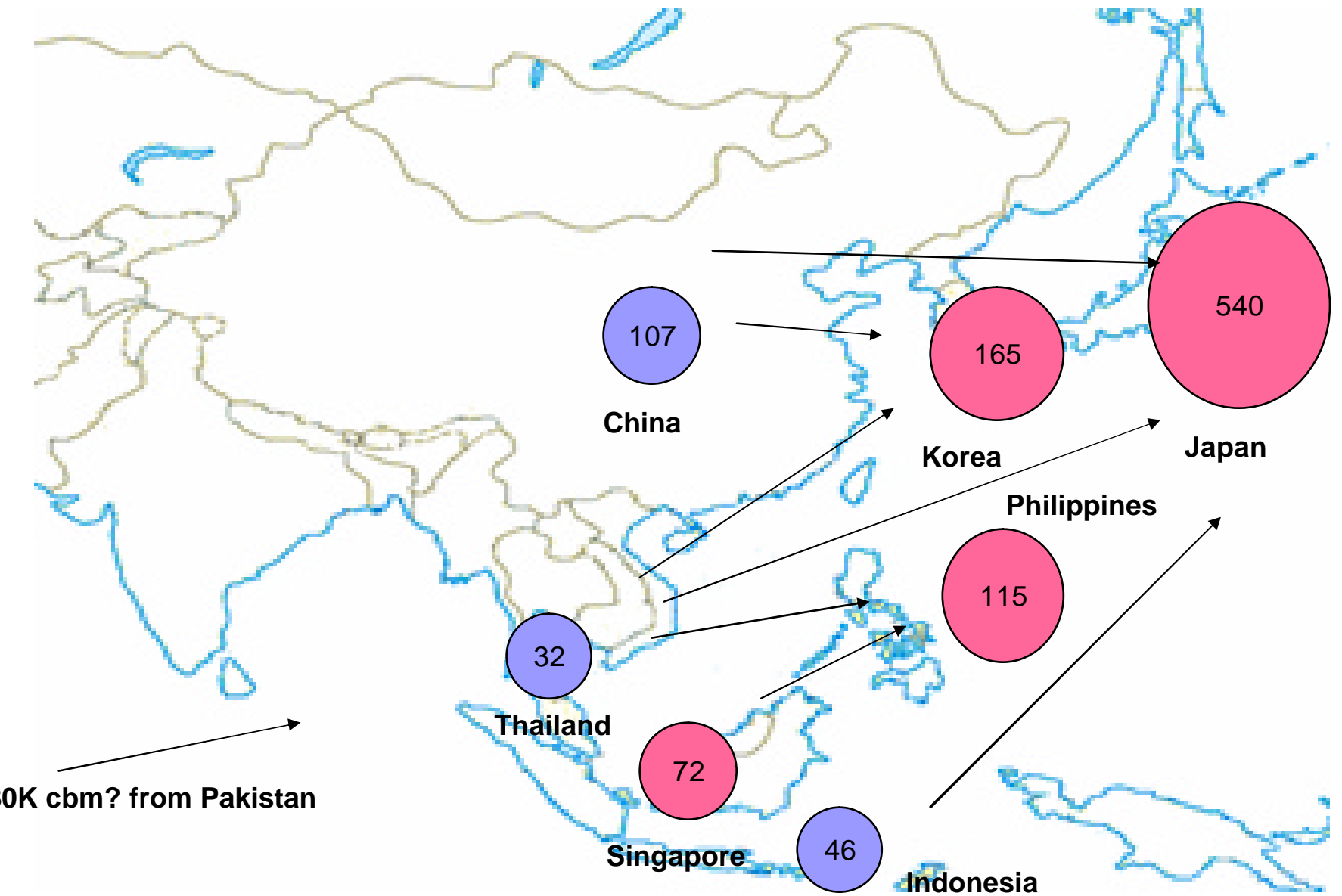




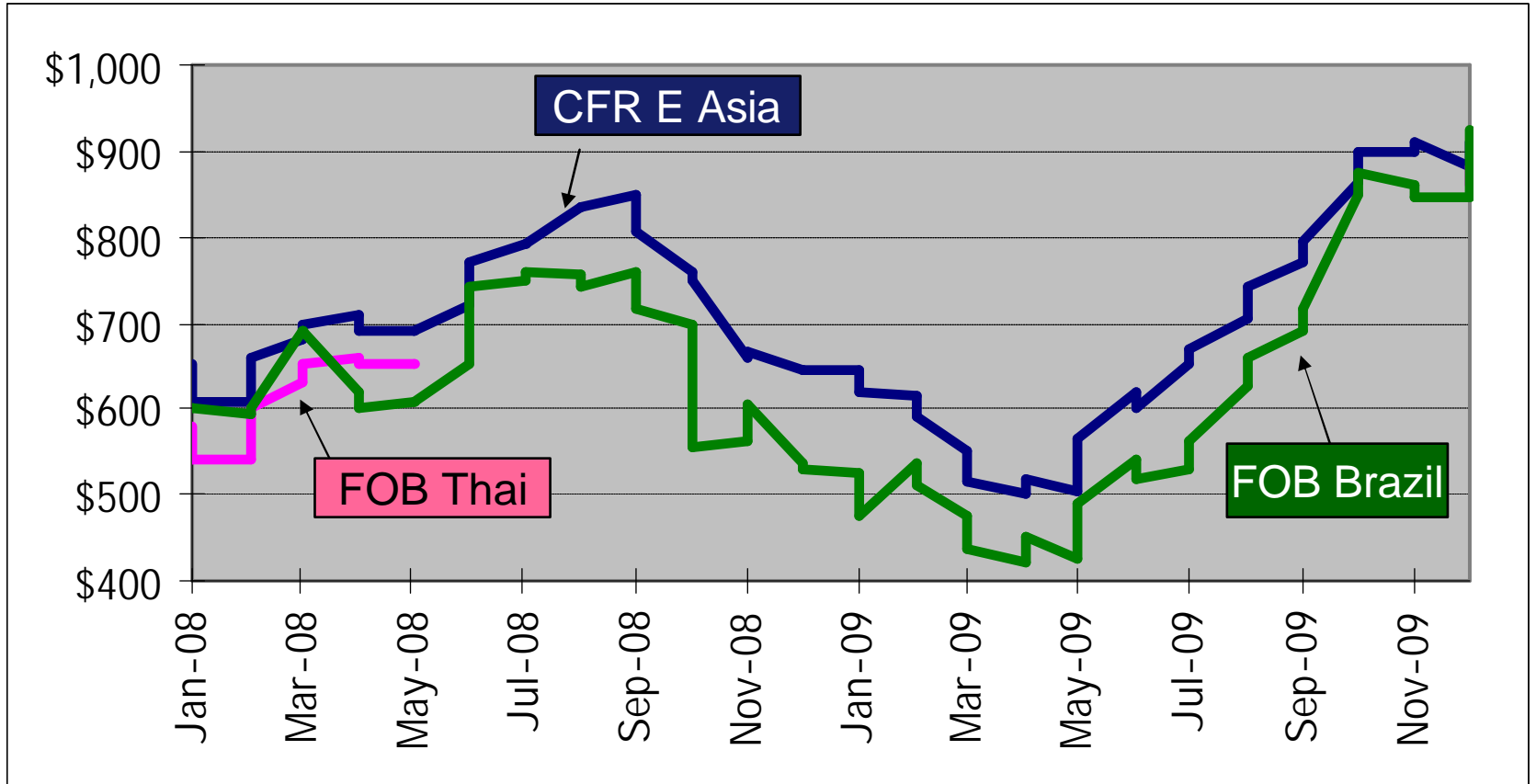
# Ethanol Trade Flow in East & SE Asia 2008 (1,000cbm)



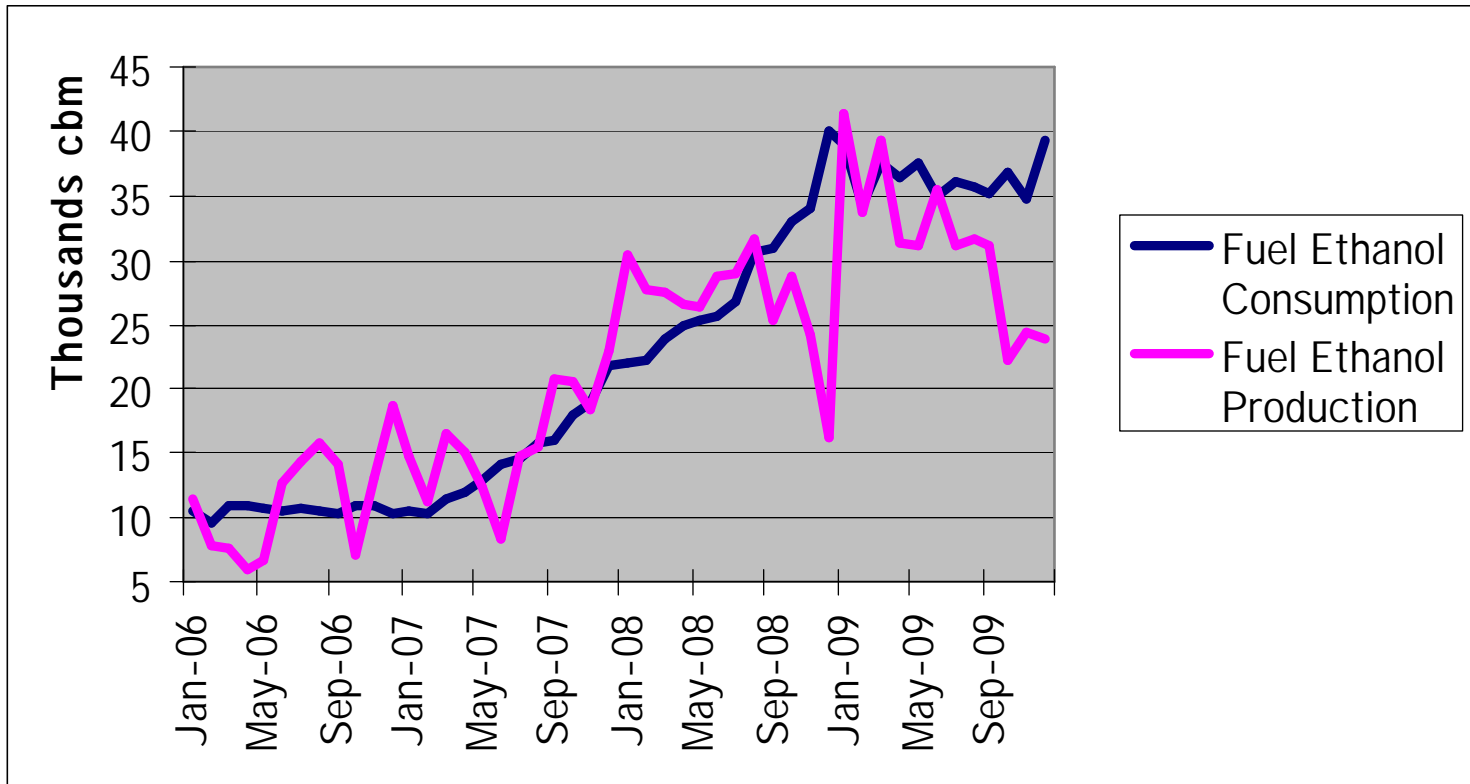
# *Ethanol Trade Flow in East & SE Asia 2009 (1,000cbm)*



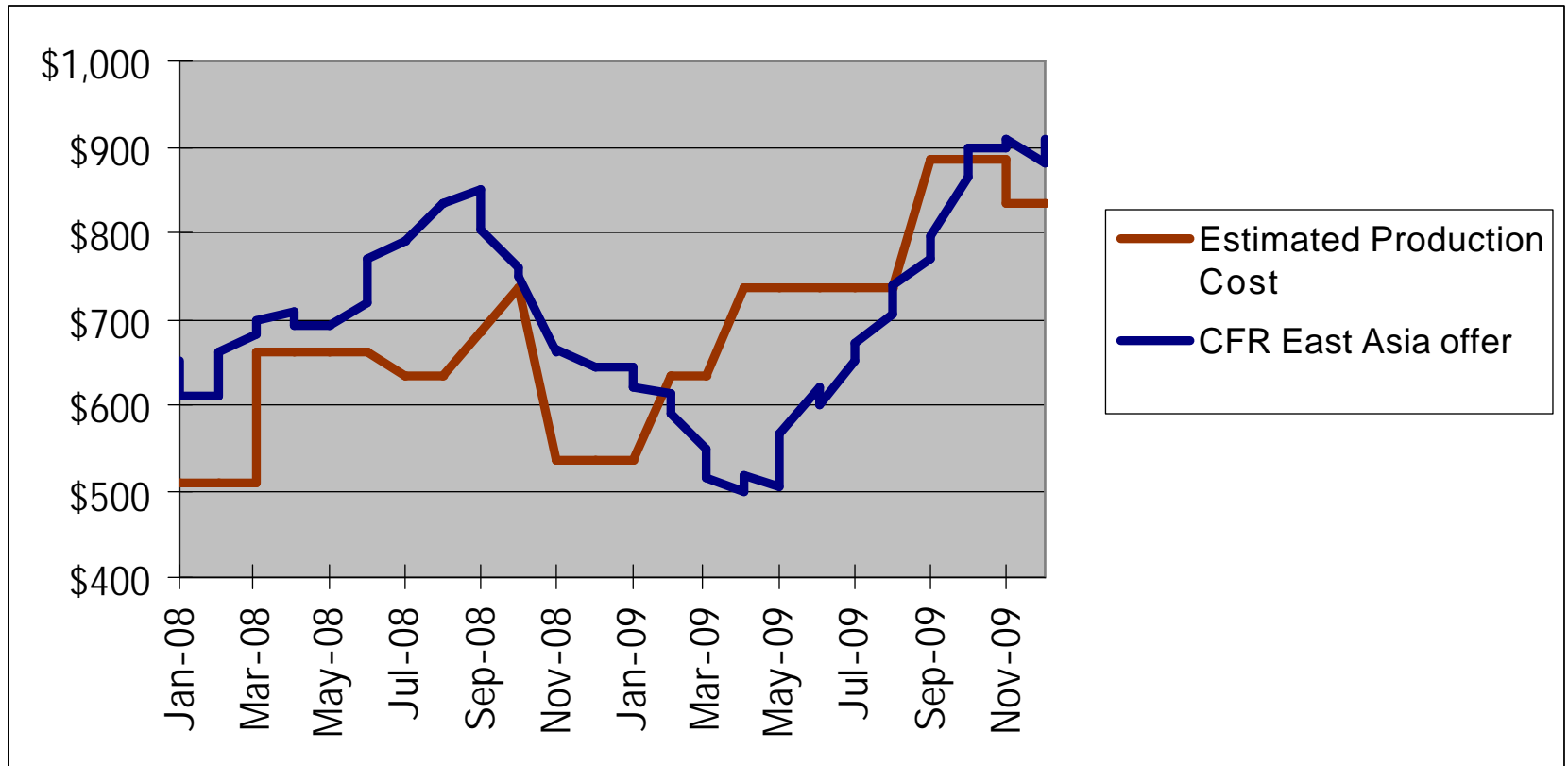
# Thai FOB Prices VS CFR East Asia and FOB Brazil



# *Fuel ethanol production VS consumption in Thailand*

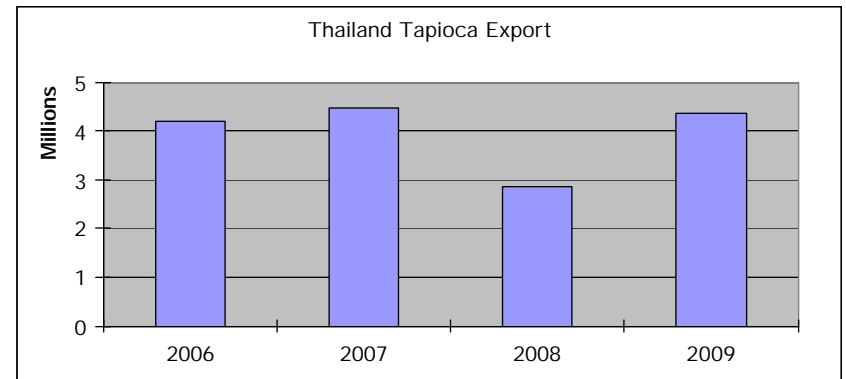
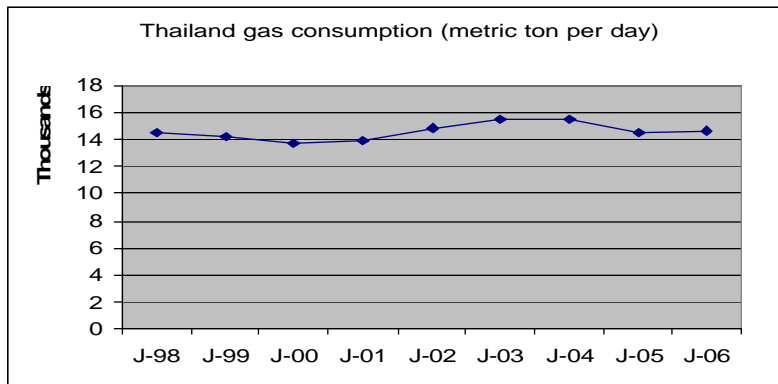
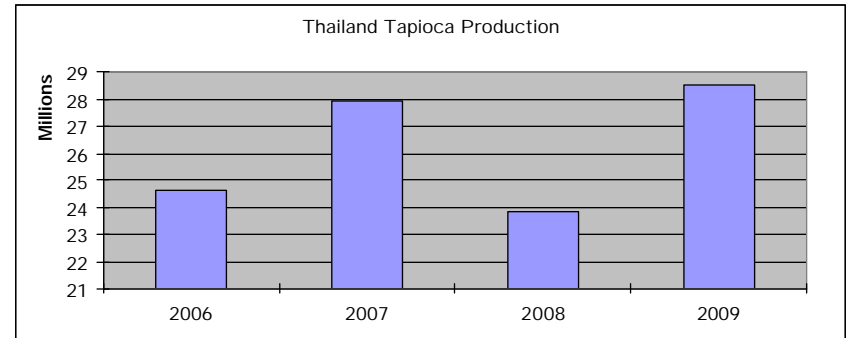
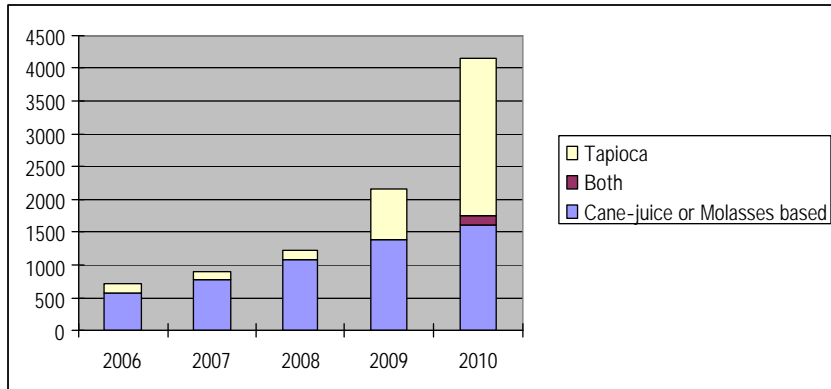


## *Thai estimated production cost VS CFR East Asia Offers*



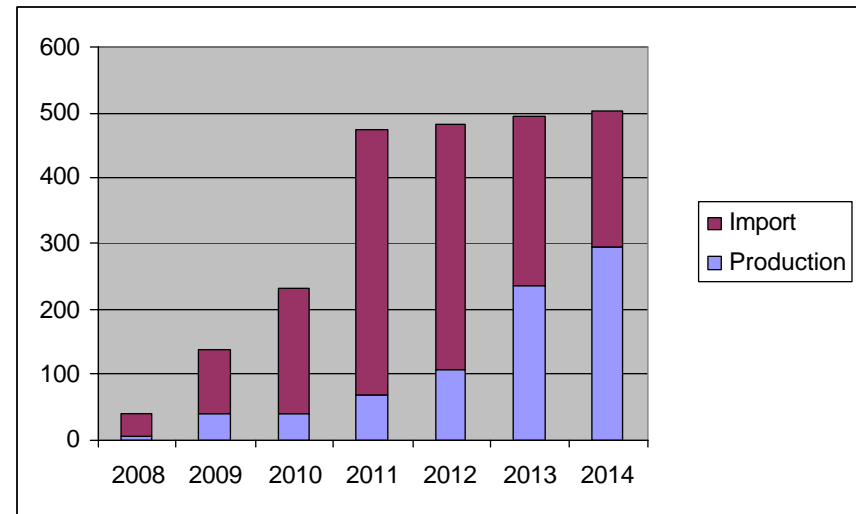
Thai Molasses based fuel ethanol = Molasses price \* 5 + \$85 (Operational Cost)

# Alternative feedstock in Thailand



# *Estimated Ethanol Balance in Philippines*

- Philippines started 5% ethanol mandate from Feb 2009
- Percentage of mandate will be increased to 10% from Feb 2011
- Production capacity will reach **640,500 cbm/yr** when all the planned ethanol plants are operational
- Philippines might shift to exporter in the future

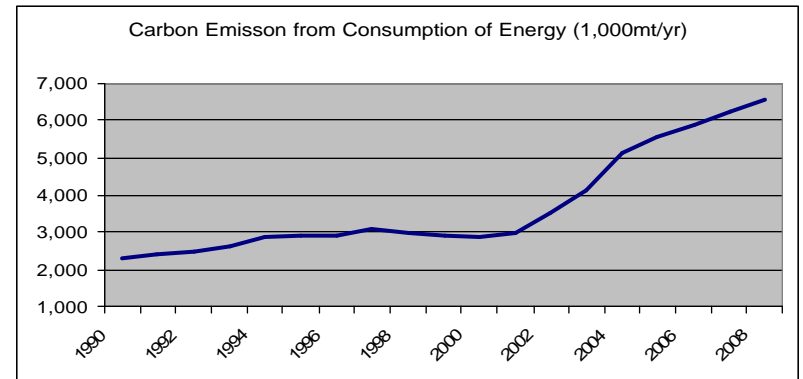
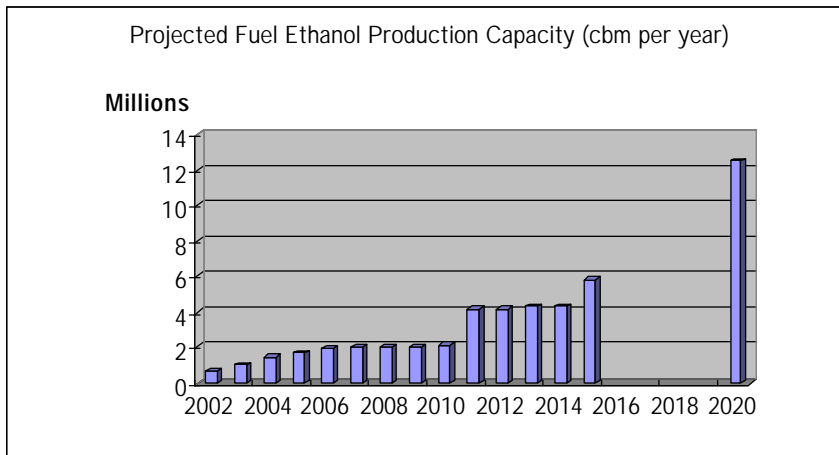
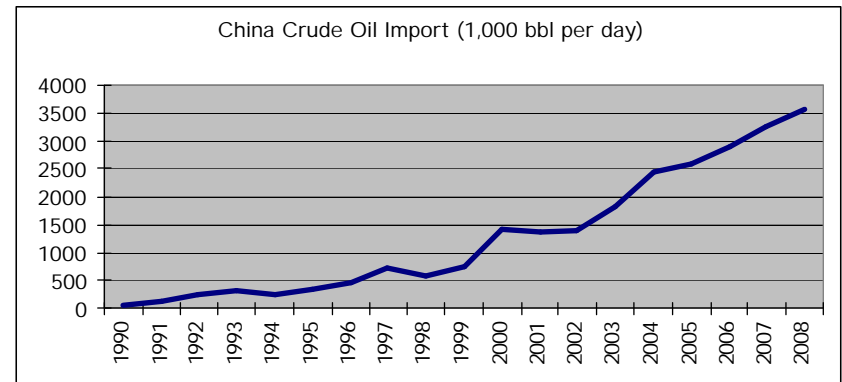


# China

China launched ethanol program in 2002 for:

- Country's energy security
- Pollution reduction
- Increasing farmers' income

Targets to produce 2million tons by 2010 and 10 million tons by 2020





# *China*

However:

- Not enough volume of feedstock available to produce ethanol
- Not enough arable land available to cultivate feedstock

*Thank you*

