Effects of World Fertilizer Prices on WV Farmers.

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Reasons for High Fertilizer Prices.

• International demand for fertilizers
  – China
  – India
  – Brazil
• Low value of the US dollar (US exporting N)
• High natural gas price (ammonia and urea)
• Closed phosphate mines
• Flooded potash mines
• Bio-energy crop push in US
Crop Prices At Historical High

- Corn and hay prices high
- Fuel costs high
- Cattle prices going down (?)
- Can we afford to apply fertilizer to hay and pasture?
Linkages in Agricultural System

- Increased energy cost!
- Lower demand for beef?
- Increased fertilizer cost!
- Increased grain cost!
- Lower feeder calf prices?
- Increased hay cost!
- Increased reliance on pasture management?
February 2008 Fertilizer Prices in Bruceton Mills WV

- Urea (46-0-0) $630/ton
- DAP (18-46-0) $770/ton
- KCl (0-0-60) $495/ton
Price per pound plant nutrient.

Urea, 46-0-0

0.46 N / lb fert. x 2000 = 920 lb N / ton

$630 / 920 = $0.68 / lb N
February 2008 Fertilizer Prices

- N from urea $0.68 / lb
- P$_2$O$_5$ from DAP $0.84
- P$_2$O$_5$ from DAP discounted for value of N $0.82
- K$_2$O from KCl $0.41
Manage the Manure

• Hay fields
  – $45-$70 of N, P, and K in a ton of hay

• Pastures
  – mineral feeding provides $300 worth of fertilizer per $600 ton of mineral.

• Crop land
  – Collect/protect confinement feeding manure

• It is too expensive to feed in the woods
Cash Flow Economics of Nutrient Management
(fertilizing for a 2 ton/acre hay yield 57 lbs N)

- Urea $39/acre
- DAP $17/acre (10 lbs P2O5/ton)
- KCl $37/acre (45 lbs K2O/ton)
  - $93/acre balance N-P-K
- 19-19-19 $86/acre (57 lbs N/acre, P-K not balanced)
- 0-10-40 $50/acre (legume for N)
- Legume N, high P & K soil test, manure management
  $0/acre
Web Links to More Information.

- World fertilizer prices surge 200% in 2007
  mongabay.com February 20, 2008


- 2007 FAPRI outlook shows impact of bioenergy expansion and trade resumption in meat products
