The Emerging Agricultural Market for FGD Gypsum

July 24, 2012
Growth in Agricultural Use of FGD Gypsum

Source: ACAA CCP Production and Use Survey Reports
Who’s buying Gypsum?

- Specialty Crop Growers
- No-Till Farmers
- Row Crop & Forage Growers
Why do farmers use gypsum?

Gypsum offers:

- Soil amendment
- Nutrients

*and*
Gypsum as a source of Calcium

- 20% calcium for peanuts, potatoes, tomatoes etc.
Gypsum as a source of Sulfur

- Sulfur deficiency is on rise
- With 16% Sulfate Sulfur, gypsum is an economical source of sulfur
Sulfur depletion

National Atmospheric Deposition Program Maps
Sulfate Ion Wet Deposition
1985-2008

National Atmospheric Deposition Program (NRSP–3). 2007. NADP Program Office, Illinois State Water Survey, 2204 Griffith Dr., Champaign, IL 61820
Gypsum as soil amendment

- Builds soils so more manageable for fieldwork
- Increases air and water penetration
- Makes soils less prone to compaction
- Reduces runoff and erosion
Gypsum as a soil amendment

- Improves water holding capacity
- Improves water infiltration
Gypsum as a soil amendment

- Less ponding
- Less erosion

Before

Gypsum applied

Iowa State University Extension and Outreach
Department of Agronomy
Gypsum as a soil amendment

- Prevents nutrient runoff

Effect of Gypsum on Erosion & P Loss

![Bar chart showing the comparison between Control and Gypsum treatments for Runoff (mm), Soil Loss (g/10 sq m), and SRP (mg/sq m).]
Gypsum as a soil amendment

- By reducing nutrient runoff, gypsum can help improve water quality in sensitive watersheds
Challenges in developing the agricultural market for gypsum

- Regulations
- Logistics
- Market Development
- Research Support
Power Plants producing FGD Gypsum in 2012
U.S. Cropland Data

Source: USDA - National Agricultural Statistics Service
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