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Introduction

With uncertain and volatile milk and feed prices, there is a greater need for effective risk management strategies that can control producer’s price risks. The newly created Livestock Gross Margin Insurance for Dairy Cattle (LGM-Dairy) is a bundled dairy farm risk management tool that insures the prices of milk and feeds from unexpected changes. The LGM-Dairy protects dairy farmers against unexpected declines in gross margins (milk prices less the feed costs) and is similar to buying both a call option to limit higher feed prices and a put option to set a floor on milk prices.

Hypothesis

Effective use of LGM-Dairy will improve economic and financial stability of dairy producers in Wisconsin.

LGM-Dairy Overview

Economic and Environmental Impacts of Wisconsin Dairy Farms

Dairy Overview

Timeline

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Resources

- UW-Extension Dairy Management  http://www.uwex.edu/ces/dairymgt/dairy.cfm
- Ag and Applied Economics Understanding Dairy Markets  http://future.aae.wisc.edu/lgm_dairy.html

Acknowledgements

Brian Gould, Project Collaborator (Ag and Applied Economics)
Mayuri Valvekar, Graduate Research Assistant (Dairy Science)

Timelines

Implications

1) Opportunities exist to use LGM-Dairy to improve economic and financial stability of Wisconsin dairy producers
2) For September 2008, premiums vary between $0.2 to $1.1 per cwt of insured milk or between 1.3 and 10.1% of the gross margin guarantee. This is very sensitive to (in order):
   - Deductible level
   - Corn equivalents per cwt of milk insured
   - Soybean meal equivalents per cwt of milk insured
3) It pays-off to include a deductible level into the insurance contract

Preliminary Results

Gross Margin Guarantee and Premium vs. Deductible Level

(September 2008, Medium Level of Corn and Soybean Meal Equivalents)

Premium = 1.1314 + 0.31 * Deductible - 0.02 * Deductible²

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Other Research/Programming Endeavors

- Improving dairy farm sustainability through strategic alternatives to corn grain feeding
- Stochastic dairy modeling to forecast economic outcomes
- Economic impact of herd diseases in Wisconsin dairy farms
- Energy and environmental impacts of Wisconsin dairy farms
- Early post calving mastitis test and treatment decision making
- Long-term economic and ecologic dairy farm sustainability in the U.S.