Dairy Revenue Protection – Dairy RP – DRP
Who is involved?

- American Farm Bureau Insurance Services, Inc.
  - Submitting organization – Crop Insurance since 1995

- American Farm Bureau Federation
  - John Newton, PH.D – Expert Economist

- Marin Bozic, PH.D – Expert Economist

- Joshua Woodard, PH.D – Expert Economist

- American Agricultural Insurance Company (AIP)

- COUNTRY Financial (AIP)
Make Farmers Great Again

Since 2013, Net Farm Income has declined by $58,000,000,000

Aug 2018 Forecast
$65.7 Billion
+6.2 Billion

Feb 2018 Forecast
$59.5 Billion

Source: USDA ERS
Gap in Risk Coverage, Milk Prices Have Fallen Nearly 50%, Revenue Down 20%

Policy Actions for Dairy Risk

- New safety net in 2014 Farm Bill (Margin Protection Program) provided limited support
- Congressional actions included emergency cheese purchases in 2016, Senate Appropriations Package

Source: USDA NASS, AFBF Calculations
All Tools Margin Based

Volatility by RFS Period and by Commodity

Policy Actions:
1st: MILC Modified to Include Feed-Adjustor
2nd: Income Over Feed Cost Policies Introduced (LGM-D and MPP)

Pre-RFS  | RFS-Build  | RFS-Capacity
---|---|---
Corn  | 13% | 34% | 11%
Milk  | 14% | 19% | 19%
Soy   | 23% | 27% | 17%
U.S. Milk Price Variability

Source: USDA NASS, Farm Bureau Calculations
One Size Does Not Fit All, Milk Prices Paid to Farmers Differ in Every County in U.S.

Class I Location Differentials
Every county in the U.S. has a regulated minimum price based on the county they are located in.

Differentials highest in South East deficit milk production regions.

Differentials are lower in milk surplus orders.

Source: USDA AMS
Most Insurance Policies are Revenue-Based

Revenue Variability

Month to month changes in revenue vary by as much as 20 percent.

Milk is a “flow” commodity so farmers have no ability to store on-farm and sell at more favorable prices.

Revenue is subject to these marketing/price constraints and changes in animal productivity.

Revenue Variability +/-20%

Hundreds of Millions of Dollars from Month to Month & Tens of Thousands of Dollars per Farm

Percent Change in U.S. Milk Revenue

Product Overview

Area-Based Revenue Insurance Product for Dairy Producers “Dairy RP”

- Protection against milk price, milk yield and revenue declines
- Quarterly coverage, sold for up to 5 nearby quarters
- Two pricing options (class price and component)
- Indexed using state-level milk production
- Few coverage declarations, minimal reporting requirements, and eligibility for all dairy farmers
- Premiums established using actuarially appropriate methods
How Milk is Really Priced

USDA Survey
- Butter
- Cheddar
- NFDM
- Dry Whey

USDA Formula & Regulated Prices Guaranteed to Farmers
- Butterfat
- Protein
- Other Solids

USDA Formula for Price Index
- Class I
- Class II
- Class III
- Class IV

LGM-Dairy
Farm Component Levels

• Choose Milk Component Levels to Determine Value of Milk in Policy

**Range of Market Average Butterfat Tests, 2017**

- Blue: Butterfat Test
- Red: Protein Test

**Range of Market Average Protein Tests, 2017**

- Blue: Butterfat Test
- Red: Protein Test

**Source:** USDA AMS, Farm Bureau Calculations
DRP – Price Guarantee

- Milk or Component Prices Are Averaged for the 3 Months of the Quarter:

  **CME Group**

  Milk and Dairy Product Futures (CIII, CIV, Butter, Cheese, Dry Whey)

  **Month 1 of Quarter**
  $18.25

  **Month 2 of Quarter**
  $18.50

  **Month 3 of Quarter**
  $18.75

  $18.50
  
  **Price Used in Dairy-RP**
Class Price Option

- Choose a Weighted Average “Mix” of Class III or Class IV Milk Futures

CME Group

Class III Milk Futures Quotes

<table>
<thead>
<tr>
<th>Month</th>
<th>Options</th>
<th>Charts</th>
<th>Last</th>
<th>Change</th>
<th>Prior Settle</th>
<th>Open</th>
<th>High</th>
<th>Low</th>
<th>Volume</th>
<th>Hi / Low Limit</th>
<th>Updated</th>
</tr>
</thead>
</table>

Class IV Milk Futures Quotes

<table>
<thead>
<tr>
<th>Month</th>
<th>Options</th>
<th>Charts</th>
<th>Last</th>
<th>Change</th>
<th>Prior Settle</th>
<th>Open</th>
<th>High</th>
<th>Low</th>
<th>Volume</th>
<th>Hi / Low Limit</th>
<th>Updated</th>
</tr>
</thead>
</table>

$16.73
100% Class III
0% Class IV

$16.53
50% Class III
50% Class IV

$16.33
0% Class III
100% Class IV
Component Pricing Option

- Choose Milk Component Levels to Determine Value of Milk in Policy

<table>
<thead>
<tr>
<th>Component</th>
<th>Minimum Component</th>
<th>Higher Component</th>
<th>Maximum Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butterfat Price</td>
<td>$2.50</td>
<td>3.50%</td>
<td>4.00%</td>
</tr>
<tr>
<td>Protein Price</td>
<td>$1.75</td>
<td>3.00%</td>
<td>3.25%</td>
</tr>
<tr>
<td>Other Solids Price</td>
<td>$0.10</td>
<td>5.70% (Fixed)</td>
<td>5.70% (Fixed)</td>
</tr>
</tbody>
</table>
Yield Adjustment Factor

\[
\frac{5,100 \text{ Lbs/Qtr}}{5,000 \text{ Lbs/Qtr}} = 1.02
\]

Yield Adjustment Factor will move the Actual Milk Revenue up/down based on Actual Milk Yields in the State or Pooled Production Region relative to the Expected Milk Yields.

Yield Adjustment Factors below 1.00 will **INCREASE** Indemnities.
Yield Adjustment Factors above 1.00 will **DECREASE** Indemnities.
Premium Subsidy

- Area-Based Revenue Protection Subsidy Schedule from FCI Act 2014

<table>
<thead>
<tr>
<th>Coverage Level</th>
<th>Premium Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% to 95%</td>
<td>44%</td>
</tr>
<tr>
<td>85% to 89%</td>
<td>49%</td>
</tr>
<tr>
<td>75% to 84%</td>
<td>55%</td>
</tr>
<tr>
<td>70% to 74%</td>
<td>59%</td>
</tr>
<tr>
<td>Below 70%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
DRP States Sales

Top 23 States
DRP Indexed to State-Level USDA NASS Milk Production Data

Outside Top 23 States
DRP Indexed to Groups of States’ USDA NASS Milk Production Data
Historical DRP Performance

Indemnity Payments 4Q 2015 Coverage
Policy: 100% Class III, 95% Coverage Level

Dollars Per Hundredweight

- 1/2/2015: $0.00
- 2/2/2015: $0.25
- 3/2/2015: $0.50
- 4/2/2015: $0.75
- 5/2/2015: $1.00
- 6/2/2015: $1.25
- 7/2/2015: $1.50
- 8/2/2015: $1.75
- 9/2/2015: $2.00
- 10/2/2015: $0.00
- 11/2/2015: $0.00
- 12/2/2015: $0.00
Questions?