Dairy Margin Protection Program 2016 Election Decisions



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What we will cover today...

- Basics of the MPP-Dairy Program
- · Participation and Payouts from last sign-up
- Making 2016 Enrollment Decisions







- Voluntary Risk Management program through FSA
- Protect farmers from unfavorable margins in the price of milk and the cost of feed inputs
- Coverage is based on the calendar year, paid in 2 month intervals
- Replaces the Market Income Loss Program (MILC) of the 2008
 Farm Bill





Margin

- Determined based on the difference between
 - National average All-Milk Price
 - National average cost of feed used to produce a hundredweight of milk

Actual Dairy Production Margin = U.S. All-Milk Price

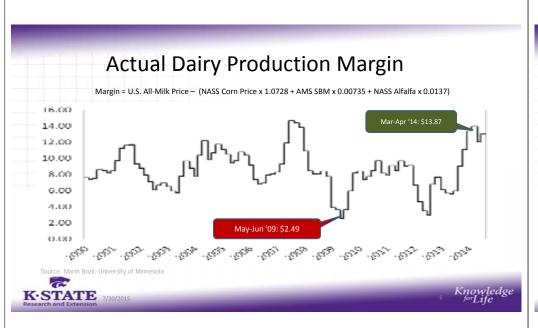
- 1.0728 x NASS Corn Price (\$/bu)
- 0.00735 x AMS Soybean Meal (Central IL) (\$/ton)
- 0.0137 x NASS Alfalfa Hay (\$/ton)

Feed ration per cwt of milk:30 pounds of shell corn

- 106.4 pounds of corn
- 14.7 pounds of sovbean meal
- 27.4 pounds of alfalfa hay









What does it cost? \$100 administrative fee every year + premium Tier 2 Tier 1 Coverage >4 M lbs. CPH ≤ 4mil lbs CPH Level (\$/cwt) (\$/cwt) \$4.00 \$0.000 \$0.000 \$4.50 \$0.010 \$0.020 \$0.025 \$5.00 \$0.040 \$0.040 \$0.100 \$5.50 \$6.00 \$0.055 \$0.155 \$6.50 \$0.090 \$0.290 \$7.00 \$0.217 \$0.830 \$7.50 \$0.300 \$1.060 \$8.00 \$0.475 \$1.360 K-STATE



Actual Dairy Production Margin 16.00 14.00 12.00 10.00 6.00 1.001 2.00 0.001 May-Jun '09: \$2.49 Knowledge for Life

How are payments calculated?

Coverage Level Selected – Actual Dairy Production Margin \$6.00 - \$5.40 = \$0.60 per cwt payment

Multiplied by the coverage percent of Production History/6 months

(7,000,000 pounds x 75%)/6 = 875,000 pounds

 $(875,000 \text{ pounds}/100) \times \$0.60 = \$5,250.00$





Production History

- Will be used in calculating all future MPP-Dairy Payments
- Established operations:
 - Highest total milk marketings from 2011, 2012, or 2013
- New operations: (less than 12 months of milk marketings as of Feb. 7th, 2014)
 - Full months of milk marketings extrapolated to a year with national index
 - Herd size multiplied by national average production per cow (21,822 pounds for 2014 & 2015)
- Production "Bump"
 - If you signed up for 2015 coverage, you will get a 2.61% PH bump for 2016





Enrollment every year

- Once you elect to participate, you are locked in for at least CAT coverage for the life of the Farm Bill
- If there is a retirement, death, or discontinuation of the business, must notify FSA for termination of the program
- Can change margin level and coverage percent every year!!!





Timeline

2016 Registration/Coverage Election July 1st- Sept. 30th, 2015

2017 Registration/Coverage Election July 1st- Sept. 30th, 2016

2018 Registration/Coverage Election July 3rd-Oct. 2nd, 2017

Administrative Fee and Premium Due

- 100% due before end of Registration/Coverage Election Period
- OR
 - At least 25% of total premium before February 1
 - The remaining 75% by June 1









Participation & Payments from 2014 & 2015 **Enrollment**

2015 Participation

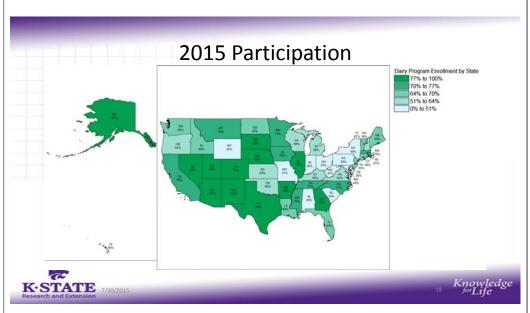
- Nationally, 55% of licensed dairies enrolled in MPP-Dairy - Of those, 56% purchased buy-up coverage
- In Kansas, 62% of licensed dairies enrolled (196 out of 315)
 - Of those 51% purchased buy-up coverage

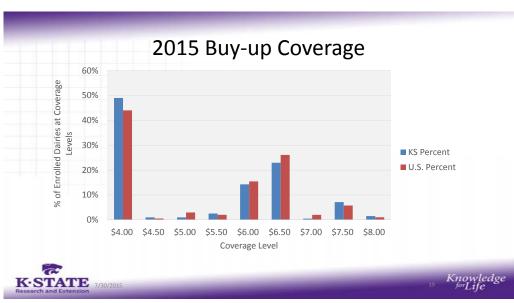


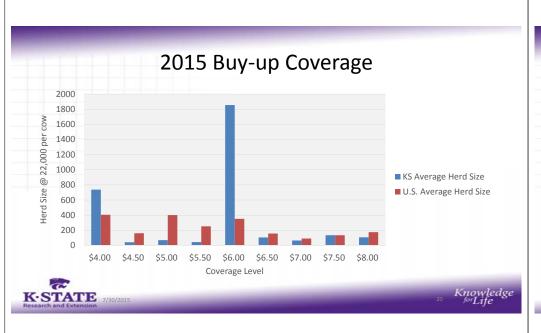












Percentage of Production History Covered

Coverage Level	Kansas	U.S.
\$4.00	90.00%	90.00%
\$4.50	90.00%	88.50%
\$5.00	90.00%	88.00%
\$5.50	90.00%	84.50%
\$6.00	89.00%	83.10%
\$6.50	82.90%	76.70%
\$7.00	90.00%	82.00%
\$7.50	79.50%	71.40%
\$8.00	90.00%	57.90%



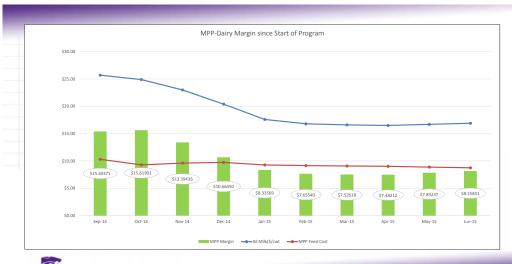


MPP Margin

Month- Year	Pay Periods	Corn (\$/bu)	Alfalfa Hay(\$/ton)	Soybean Meal (\$/ton)	All Milk(\$/cwt	MPP Feed Cost	MPP Margin	Milk Margin/pay Period
Sep-14		3.48	197	525.72	25.70	\$10.30	\$15.40371	
Oct-14	5	3.56	194	381.5	24.90	\$9.28	\$15.61901	\$15.51136
Nov-14		3.58	184	441.39	23.00	\$9.61	\$13.39436	
Dec-14	6	3.78	183	431.73	20.40	\$9.74	\$10.66450	\$12.02943
Jan-15		3.81	174	380.02	17.60	\$9.26	\$8.33569	
Feb-15	1	3.79	172	370.38	16.80	\$9.14	\$7.65540	\$7.99554
Mar-15		3.81	172	357.83	16.60	\$9.07	\$7.52618	
Apr-15	2	3.75	184	336.61	16.50	\$9.02	\$7.48212	\$7.50415
May-15		3.62	192	320.23	16.70	\$8.86	\$7.83237	
Jun-15	3	3.58	178	335.03	16.90	\$8.74	\$8.15831	\$7.99534









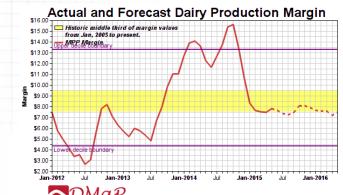


Making 2016 Enrollment Decisions



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Where will the Margin be in 2016?





Updated 7/24/15





Let's Look Back in Time 2010 Coverage Level \$4.00 \$4.50 \$5.50 \$5.50 \$5.50 \$6.00 \$6.50 \$7.00 \$7.50 \$8.00 Participation Cost \$5100 \$6460 \$51,000 \$51,540 \$52,080 \$63,340 \$67,912 \$610,900 \$617,200 \$617,200 \$61,000 \$61,540 \$61,000 \$61,000 \$61,540 \$61,000 \$





If We Picked the Optimal Strategy **Optimal Outcome** Optimal Strategy 2005 \$4.00 -\$100 2006 \$8.00 \$1,673 2007 \$4.00 -\$100 2008 \$4.00 -\$100 2009 \$8.00 \$106,715 2010 \$4.00 -\$100 2011 \$4.00 -\$100 2012 \$8.00 \$78,885 2013 \$8.00 \$35,687 2014 \$4.00 -\$100

Total

per cow

per cwt

\$224,137

\$128.08

\$0.56

If We Picked Advanced Strategy

Year	Advance Strategy	Advance Outcome
2005	\$4.00	-\$100
2006	\$4.00	-\$100
2007	\$6.00	-\$2,080
2008	\$6.00	-\$2,080
2009	\$8.00	\$106,715
2010	\$4.00	-\$100
2011	\$8.00	-\$16,209
2012	\$6.50	\$48,004
2013	\$6.50	\$14,930
2014	\$4.00	-\$100

Total	\$148,880
per cow	\$85.07
ner cwt	\$0.37



If We Picked Risk Strategy

	Year	Risk Strategy	Risk Outcome
	2005	\$6.50	(\$3,340)
	2006	\$6.50	(\$3,340)
	2007	\$6.50	(\$3,340)
	2008	\$6.50	(\$3,340)
	2009	\$6.50	\$75,574
	2010	\$6.50	(\$3,340)
	2011	\$6.50	(\$3,340)
	2012	\$6.50	\$48,004
	2013	\$6.50	\$14,930
	2014	\$6.50	(\$3,340)
		Total	\$115,128
C.		per cow	\$65.79
K-STATE 7/30/2015		per cwt	\$0.29

MPP: USDA Funded Producer Decision **Education Project**

www.dairymarkets.org/MPP

www.fsa.usda.gov/mpptool





8 Extension **Economists**

7 Land Grant Institutions



K-STATE

MPP-Dairy Decision Tool Program on Dairy Markets and Policy K-STATE

MPP-Dairy Decision Tool Margin Protection Program Decision Tool



K-STATE

K-STATE 7/30/2015

Knowledge

MPP-Dairy Decision Tool



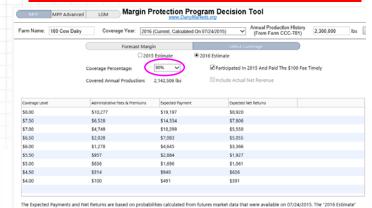
This table shows the expected margin and probability of a Payment in the two-month intervals protected by the insurance levels in the Margin Protection Plan. The Expected Margin and Probabilities are calculated from futures market data available on 07/24/2015.



K-STATE 7/30/2019



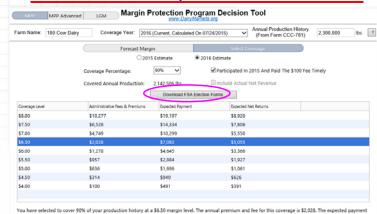
MPP-Dairy Decision Tool

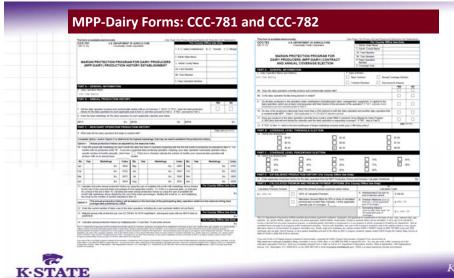


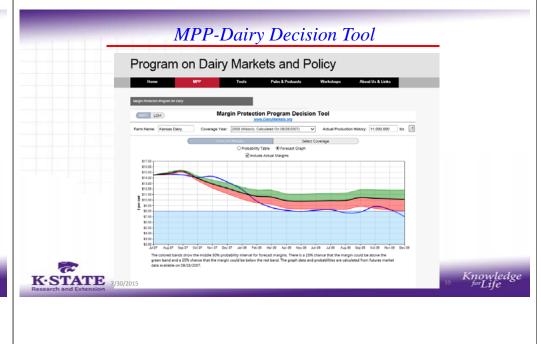
values are the period over which you must elect a coverage level and percentage of production history

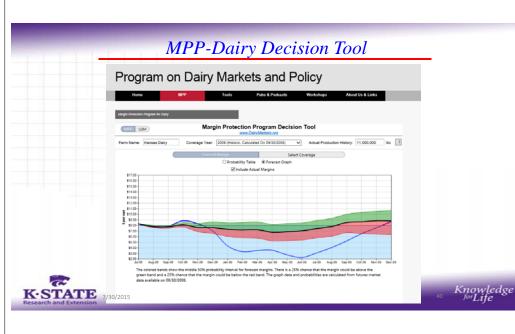
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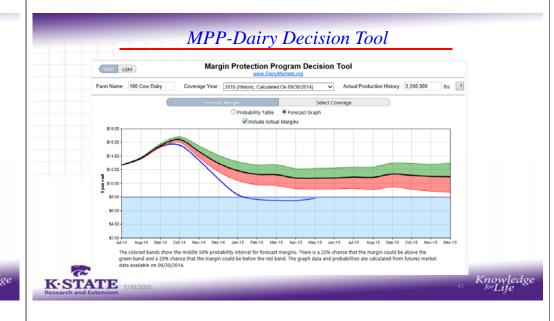
MPP-Dairy Decision Tool

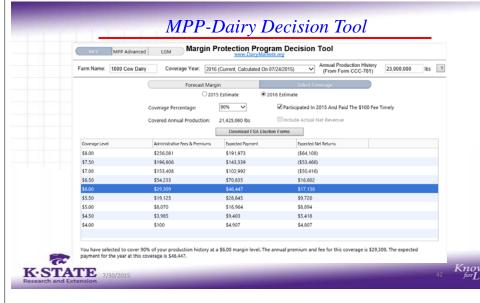












Risk Management

- Are we using MPP-Dairy for Risk Management or to maximize payments?
 - How much loss can your dairy operation tolerate?
 - Short-term vs. Long-term





Example

Category	Budget (per cwt)
Farm Costs of Production	\$22.22
Feed Costs	\$10.51
Non-Feed Costs	\$11.71
Revenue Per cwt	\$20.37
Budgeted Farm Income over Feed Cost (IOFC)	\$9.86
MPP Basis (Farm IOFC- MPP IOFC)	\$??
Needed MPP Coverage Level to cover all Costs of Production	\$??





MPP Basis

Year	Feed Cost (per cwt)	Revenue (per cwt)	Farm IOFC (RevFeed Cost)	MPP-Dairy Historical Margin	MPP Basis (Farm IOFC- MPP Margin)
2010	\$8.67	\$18.86	\$10.19	\$8.25	\$1.94
2011	\$13.46	\$24.03	\$10.57	\$8.82	\$1.75
2012	\$15.26	\$22.44	\$7.18	\$5.31	\$1.87
2013	\$15.78	\$23.29	\$7.51	\$7.19	\$0.32
2014	\$13.19	\$28.51	\$15.32	\$13.31	\$2.01
Average					\$1.58





Example

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Costs of Production	\$22.22
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MPP Basis (Farm IOFC- MPP IOFC)	\$1.58
Needed MPP Coverage Level to cover all Costs of Production	\$10.13





Example

- How much loss can be incurred? Does all risk need to be covered?
- What is the highest debt-to-asset ratio the farm/bank is willing to tolerate?





Example

	Current Debt-to- Asset Ratio	Tolerated Debt- to-Asset Ratio	Assets per CWT	Net Farm Income Loss that will raise D/A by 10%	Net Farm Income Loss Tolerated
Farm 1	12%	30%	\$35.00	\$3.50	\$6.30
Farm 2	25%	30%	\$35.00	\$3.50	\$1.75
Farm 3	12%	30%	\$50.00	\$5.00	\$9.00
Farm 4	25%	30%	\$50.00	\$5.00	\$2.50

		NFI Loss Tolerated	MPP Coverage Level to fully protect Cost of Production	MPP Coverage Level Given Tolerance for Loss
	Farm 1	\$6.30	\$10.13	\$3.83
	Farm 2	\$1.75	\$10.13	\$8.38
	Farm 3	\$9.00	\$10.13	\$1.13
-	Farm 4	\$2.50	\$10.13	\$7.63
K-STATE				4

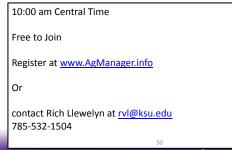
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Program on Dairy Markets and Policy | Program on Dairy Markets and Po

September 3rd Webinar

- Featuring a 2016 Dairy Market Outlook
- Showcase of the new MPP-Dairy Tool





Should this be your only risk management plan?

- Hedges (milk, corn, soybean meal)
- Options (put to establish floor price on milk, call to for price ceiling on corn and soybean meal)
- Forward contracting (selling milk, purchasing feed)
- LGM Dairy





What will the program do for you?

- Provides significant risk management for extreme downturn events
- Positive long-term expected value





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