

# KNOWLEDGE EXCHANGE PARTNER

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## How Dairy Revenue Protection Works

Since their peak in 2014, milk prices have fallen by more than 30 percent. In response to this challenging environment, the USDA Risk Management Agency approved a new crop insurance option, Dairy Revenue Protection (Dairy-RP), which was developed by the American Farm Bureau Federation. Dairy-RP offers protection against an unexpected decline in milk revenue (whether that comes from yield or price).

So how does Dairy-RP work? Coverage is provided on a quarterly basis, and an indemnity is paid to the farmer if actual milk revenue falls below their revenue guarantee. Farmers can guarantee between 70 and 95 percent of production in five percent increments. Premiums are subsidized by USDA on a sliding scale, from 59 percent at the 70 percent coverage level, to 44 percent at the 95 percent coverage level.

Producers can choose how the policy measures milk revenue, using either a class or component-based price option. The class-based pricing option uses a weighted average of Class III and IV milk prices from the Chicago Mercantile Exchange (CME). The component-based price option uses the average of CME butter, cheese and whey futures.

The farmer then chooses a component value of milk based on the amount of butterfat and protein. There is also a mechanism in the program to adjust for changes in expected milk yield for each state or region. If the actual milk revenue to the farm is below the purchased revenue guarantee, on a quarterly basis, then an indemnity is paid to the farmer.

New in this program is an “optional protection factor.” Because farm milk revenue can vary to a greater extent than national averages, the program allows farmers to choose an additional protection factor from 1.05 to 1.50 in five percent increments. In the event an indemnity is paid, farmers who purchased the optional protection factor will have their payments increased by that protection factor. For example, a farmer with a 1.50 protection factor and an indemnity calculated at \$10,000 would end up receiving \$15,000.

**Dairy-RP offers  
protection  
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revenue.**

In summary, to participate in the program, producers have five decisions to make:

1. The method used to value milk (class or component);
2. The amount of milk production to cover;
3. The level of coverage (ranging from 70 to 95 percent of the revenue guarantee);
4. Which quarterly contracts to purchase; and
5. Whether to buy an optional protection factor.

Each coverage situation is unique, but here are a couple of scenarios for illustrative purposes:

2019 Jan. - March	Class Price Option	1,000,000 lbs.	Protection Factor 1.0	CME Expected Price (III & IV Avg.) \$15.63		
Coverage Level	Guarantee per cwt.	Premium per cwt.	Total Guarantee	Total Coverage	Total Premium	Producer Premium Cost
70%	\$10.94	\$0.0087	\$109,375	\$109,375	\$213	\$87
85%	\$13.28	\$0.0109	\$132,813	\$132,813	\$213	\$109
90%	\$14.06	\$0.0308	\$140,625	\$140,625	\$550	\$308
95%	\$14.84	\$0.1145	\$148,438	\$148,438	\$2,045	\$1,145

Figure 1: Coverage Analyzer 2019 Crop Year Illustration, Rain and Hail L.L.C.; this table is for estimate purposes only.

2019 Jan. - March	Class Price Option	1,000,000 lbs.	Protection Factor 1.5	CME Expected Price (III & IV Avg.) \$15.63		
Coverage Level	Guarantee per cwt.	Premium per cwt.	Total Guarantee	Total Coverage	Total Premium	Producer Premium Cost
70%	\$10.94	\$0.0131	\$109,375	\$164,063	\$319	\$131
85%	\$13.28	\$0.0163	\$132,813	\$199,220	\$319	\$163
90%	\$14.06	\$0.0461	\$140,625	\$210,938	\$824	\$461
95%	\$14.84	\$0.1718	\$148,438	\$222,657	\$3,067	\$1,718

Figure 2: Coverage Analyzer 2019 Crop Year Illustration, Rain and Hail L.L.C.; this table is for estimate purposes only.

Dairy-RP signups for the first quarter of 2019 open **October 9, 2018**. For a coverage quote for your individual situation, contact a crop insurance agent. Policies are sold by authorized crop insurance agents, including Crop Growers, LLP. To find an agent near you, visit [CropGrowers.com](http://CropGrowers.com) or call 1-800-234-7012.

A Dairy Risk Management webinar, held on October 05, will discuss Dairy-RP along with other risk management tools. To register or for more information, visit [FarmCreditEast.com/Webinars](http://FarmCreditEast.com/Webinars).

## AgTech: An Analysis of a Rapidly Growing Field

Agriculture has always embraced and adopted new technologies. Going all the way back to such inventions as the cotton gin, farmers, ag suppliers and processors have continually sought out and developed new technology and innovation that has often disrupted the industry. Historically, most of this innovation has come from within the agricultural community, such as farmers themselves, ag equipment manufacturers, land-grant universities and others.

Lately, however, we are seeing increased participation from outside the traditional ag community – from Silicon Valley startups to venture capital firms – and others who see the agricultural sector as ripe for disruption.

The Northeast U.S., specifically Boston and New York City, has emerged as one of the hubs of ag tech innovation. Despite the fact that many of these technologies are focused on larger-scale production in the western part of the U.S., much of their research and development is being conducted in our backyard.

A few of these technologies are controlled environment agriculture (CEA), cellular agriculture, microbiome technology, agri-food tech hubs, food waste reduction, aquaculture automation, vertical farms, self-propelled equipment, insect farming, robotics, advanced breeding techniques such as CRISPR, producer networks, and a host of others.

For insight into this ag tech innovation, our *Today's Harvest* blog recently kicked off a series of four articles that look at a few of these up-and-coming technologies. The first post in the series is titled, ***The Ups and Downs of Vertical Farming***. While we may not see these advancements commercially for some time, these new technologies hold promise to change agriculture as we know it. To read each of these four articles as they're available, visit [FarmCreditEast.com/TodaysHarvest](http://FarmCreditEast.com/TodaysHarvest).

### CONTACT INFORMATION

We look forward to your questions about Knowledge Exchange Partner and your feedback:

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