



Comparing AGR-Lite with other crop insurance programs

By James Sedman and John Hewlett

Agricultural producers have a wide range of insurance products available under the Federal Crop Insurance Corporation program. Adjusted Gross Revenue Lite (AGR-Lite) has been available to most producers since late 2007.

AGR-Lite is a whole-farm enterprise-based insurance program designed to protect a producer's total revenue against changes in price and yields.

This differs from the multi-peril crop insurance (MPCI) and revenue-based policies because of its whole-farm approach – rather than insuring specific crops. AGR-Lite is still new so understanding how it compares to other types of crop insurance may be beneficial for producers deciding which type of policy best fits their risk management plan.

AGR-Lite and MPCI Components

AGR-Lite is a whole-farm insurance product that can be used in conjunction with other crop insurance policies as well as on its own. While other types of crop insurance focus on individual crops and livestock and determine indemnities accordingly, AGR-Lite pays indemnities when whole-farm revenue declines below a target level. This type of policy is also intended for producers who may not be able to utilize other crop insurance programs.

A producer first calculates a five-year average gross farm revenue from tax information. Next, calculate the expected gross farm income from all farming enterprises. This is then averaged to calculate the adjusted gross revenue. The producer then decides on a coverage level (up to 80 percent of adjusted gross revenue for three qualifying commodities), which determines the trigger revenue. An indemnity payment is made in the year following a loss if actual revenue falls below the trigger level.

MPCI policies are based on a producer's actual production history (APH), which determines the yield level below which indemnities are paid. A producer insures either units or acres, and an indemnity payment occurs if yield drops below the trigger yield determined by the coverage level. An MPCI policy insures the producer against yield loss either on a whole-farm or a specific-unit (farm or acreage) basis. Unit elections possible can vary by area and producer, so producers should check with their crop insurance agent for availability.

To establish an MPCI policy, a producer selects a yield election for the acres insured, usually 50-95 percent of the APH yield depending upon the policy and area. A trigger

yield and price election are then established, which are the yield level at which indemnities are paid and the predicted price at harvest time, respectively. If a producer suffers a yield loss, the indemnity is calculated by first determining the actual yield and subtracting that from the trigger yield. This yield is then multiplied by the price election, which results in a per-acre indemnity. It is important to note MPCI policies do not insure against losses of revenue from changes in price.

Wheat Farm Example

To compare AGR-Lite with MPCI insurance, let's look at an example of a 500-acre wheat farm. The APH yield is 25 bushels per acre, and the adjusted average gross revenue (for AGR-Lite purposes) is \$55,000. Assume a typical MPCI policy with 75-percent coverage and an AGR-Lite policy with 75-percent coverage. The trigger level of revenue for the AGR-Lite policy is \$41,250 (adjusted average gross revenue times 75 percent), with a payment rate of 90 percent. The trigger yield for the MPCI policy is 18.75 bushels/acre (APH times 75 percent), also with a 90-percent price election. Now assume a late frost occurs and the average yield for the 500 acres of wheat is eight bushels per acre, with a harvest price of \$4.50/bushel.

For the AGR-Lite policy, the total gross revenue for the farm was \$18,000 (harvest price times harvest yield), \$37,000 below the adjusted gross revenue and \$23,250 below the trigger level. The indemnity payment is calculated by multiplying \$23,250 by the payment rate of 90 percent, which equates to an indemnity payment of \$20,925. Thus, total revenue after the indemnity payment is \$38,925.

The MPCI policy calculates the indemnity payment first by subtracting the actual yield from the trigger yield, which equals 10.75 bushels/acre. The price used in calculating the indemnity equals the harvest price of \$4.50/bushel times the price election of 90 percent, equaling \$4.05/bushel. The indemnity payment is 10.75 bushels times \$4.05, which equals \$43.54 per acre or \$21,769 total resulting in total revenue after the indemnity payment of \$39,769.

Protection Against Yield and Price Declines

The previous analysis shows the two types of insurance are fairly close in terms of indemnity payout for the wheat farm in this scenario; however, AGR-Lite may provide additional protection if there is a price event that also occurs at the

time of harvest, because it provides whole-farm revenue coverage. For example, suppose the price at harvest declines to \$2.90/bushel. The total revenue (before indemnity) drops to \$11,600. The trigger yield of 10.75 bushels remains the same for the MPCI policy, but the price has dropped to 90 percent of \$2.90. This equates to \$2.61/bushel, and therefore an indemnity payment of \$28.06 per acre and \$14,030. Contrast this with the indemnity payment of the AGR-Lite policy, which takes into account the price decrease. The total gross revenue of \$11,600 is \$29,650 below the trigger level, resulting in an indemnity payment of \$26,685.

This comparison has demonstrated several advantages and disadvantages of utilizing each of these types of insurance. Producers should assess their individual risk management needs to determine what type of insurance best fits their needs. It is important to note the analysis presented here does not take into account premium costs associated with the insurance types. Premiums vary with different states and areas, and it is generally the case that the more extensive the insurance is the more expensive the coverage. AGR-Lite may be more favorable to those producers who cannot withstand smaller production losses, have low APH yields, need a stable gross revenue stream, or have a smaller-sized operation for which traditional crop insurance may not be a good fit.

Larger operations with gross revenue over \$2,051,000 per year are not eligible for AGR-Lite coverage, so the traditional crop insurance policies are their best insurance option. Policies other than AGR-Lite may be the most cost efficient option for operations that produce traditional commodities, depending upon premium costs and coverage available.

Contact a local crop insurance agent for more information on AGR-Lite and other crop insurance coverage. The agent will be able to assist in developing a whole-farm risk management plan and the best coverage level for an operation. For more information on this and other risk management topics on the Web, visit the Western Risk Management Library at agecon.uwyo.edu/riskmgt or the USDA Risk Management Agency at www.rma.usda.gov.

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Jessie Sturman, left, and Zach Gill, both of Niobrara County, inject a banana and orange with colored water to show the difference between subcutaneous and intramuscular injections.

Wyoming Youth Quality Assurance program teaches 4-H'ers how to raise quality livestock

By Tammie Jensen

With fair season upon us, 4-H members are busy preparing their livestock for the show ring and junior livestock sales. Potential buyers may want to determine if the 4-H'er they are buying from has been involved in the Wyoming Youth Quality Assurance program (WYQA).

The program is based on many of the same principles as beef, sheep, dairy, and swine assurance programs adult producers use to increase consumer confidence in the meat and milk products they raise. Quality assurance is the producers' promise they will use sound management, nutrition, and health-care practices to ensure a safe, wholesome, and enjoyable eating experience for the consumer.

The goal of WYQA is to help 4-H'ers understand their responsibility in raising livestock for food, teach the technical knowledge of quality assurance, and help members update management practices to be consistent with quality assurance guidelines. Additional goals include enhancing 4-H educational programs and increasing both youth and adult leadership skills.

To achieve these goals, the program covers the basic principles of quality assurance. To teach these principles, the program is broken into three levels and is designed to teach only one level each year.

Level 1 is for 8- to 11-year-old members with the focus being on animal nutrition, identification, housing, and prevention methods. Level 2 targets ages 12-14 and addresses the importance of carcass merit and management practices that can enhance or negatively impact meat quality. Senior members, ages 15-18, are challenged in level 3. Material covers withdrawal times associated with both injected and feed medications, various injection methods, and record keeping.

Each level is presented in an easy-to-understand format that takes approximately two hours per level.

To find out more about the WYQA program in your county, contact your local University of Wyoming Cooperative Extension Service (UW CES) office for additional information. Contact information is available online at <http://ces.uwyo.edu/Counties.asp>.

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