Using AGR-Lite insurance in crop operations

By James Sedman, John Hewlett, and Duane Griffith

Western crop producers have a wide range of insurance options for their overall risk management plan under the umbrella of the Federal Crop Insurance Corporation (FCIC).

Producers may choose to insure using yield-based, multi-peril policies (MPCI), different types of crop revenue insurance, or group policies. A relatively new insurance product called AGR-Lite, or Adjusted Gross Revenue-Lite, is also available to crop producers in 35 states including Wyoming and Montana.

AGR-Lite is a whole-farm, revenue-based insurance program that protects a producer's whole farm revenue against changes in price and yield. AGR-Lite was developed with the intent of covering producers where traditional crop insurance programs may not be the best fit for effectively managing their risk. While most crop producers may be eligible to receive coverage under traditional programs, these may not be as effective as desired for a variety of reasons: the overall size of operation, low or no average production history (APH) yield records, or the coverage available is not effective for multiple losses over several enterprises.

AGR-Lite insurance protects against drops in revenue that may come from either declines in price, in yield, or both – much like crop revenue insurance policies. AGR-Lite differs from revenue and MPCI policies where the revenue from the entire farm is protected, not just the income from specific crops. AGR-Lite provides farm-specific revenue insurance that can cover most commodities, including several commodities not insurable with other federally subsidized insurance plans in many Western states. This article will discuss the provisions of AGR-Lite and show how it works as a stand-alone product or in conjunction with other crop insurance products.

AGR-Lite Provisions

AGR-Lite is available to producers actively engaged in farming or ranching under any form of business organization and who have at least a 10-percent ownership interest in the business. A producer must have five consecutive years of 1040 Schedule F or other tax returns (filed as the same entity for seven years), and their total adjusted annual gross income must be less than $2,051,282 ($1 million of liability coverage). An eligible producer's total income from agricultural commodities purchased for resale must be less than 50 percent of the operation's Adjusted Gross Revenue (AGR).

AGR-Lite plans differ from more traditional crop insurance plans as they cover the producer's fiscal year, not just individual commodities for the crop or livestock production period.

An AGR-Lite insurance policy consists of two main parts – a producer's AGR determined from the last five consecutive years of IRS tax returns, and the annual farm report[1] that determines the annual income and expenses allowable to determine the base revenue guarantee[2]. In the farm report, the annual income and expenses from each crop enterprise determine the AGR guarantee. AGR-Lite coverage levels of 65, 75, and 80 percent are allowed; however, to obtain the 80-percent coverage level, at least three commodities must be specified in the annual farm report – corn, wheat, and alfalfa, for example. For the 65- and 75-percent coverage, only one commodity is necessary. Payment rates are available at 75 and 90 percent of the revenue guarantee. These values are summarized in Table 1. Premiums are subsidized like all FCIC products, with increased coverage levels receiving a lower premium subsidy. It is important to note that, in a producer's farm plan, the average approved expenses for the five-year period are also calculated, as well as an approved expected expense level for the coming insurance period. If actual expenses are 70 percent less than expected, the AGR is adjusted to reflect the difference. Indemnities are paid at the end of the fiscal year if actual adjusted revenue is below the revenue guarantee.

Crop Production Example

An example south-central Montana/north-central Wyoming corn farm will be used to illustrate how AGR-Lite works. Suppose the farm produces irrigated corn on 800 acres, with an AGR of $290,000. The average yield is 125 bushels per acre, with an average price of $2.90 per bushel. In the farm plan, the AGR is $290,000 and the expected allowable expenses are $150,000. Assume for now the farm chooses no other insurance coverage. The 75-percent coverage level and a 90-percent payment rate are selected. This equates to a revenue guarantee of $195,750 (75-percent coverage times AGR times the 90-percent payment rate).

Now assume a typical MPCI policy for the same farm. The APH yield for the farm is 125 bushels per acre. The farm chooses the 75-percent coverage level and a 90-percent payment rate for the MPCI policy. This equates to a per-acre coverage level of 84.38 bushels per acre (125 APH times 75-percent coverage times the 90-percent payment rate). Remember that MPCI policies only protect against changes in yield and not price. The AGR-Lite and MPCI policies for the farm are summarized in Table 2.

Assume a drought occurs, and the farm's average corn yield drops to 75 bushels/acre. Under the MPCI policy, the yield falls below the trigger level and the loss totals 18.75 bushels. The payment rate is 90 percent of the loss. Assuming a corn price of $3/bushel, the indemnity payment is $50.63/acre for a total indemnity of $40,500. Under the AGR-Lite policy, the total actual revenue for the year equals $180,000 (75 bushels/acre times 800 acres times $3/bushel). This is $37,500 below the trigger level, resulting in an indemnity at a 90-percent payment level of $33,750. This indemnity payment is lower than received under the MPCI policy.

The AGR-Lite policy gains the advantage where we also consider a market event affects corn price and the resulting farm revenue. Suppose the drought yield remains the same (75 bushels per acre) along with a low price of $2.50 per bushel. The MPCI indemnity now becomes $33,750. With the AGR-Lite policy, the actual revenue becomes $150,000 and the resulting indemnity equals $60,750 ($217,500 minus $150,000 times 90 percent). These results are summarized in Table 3.

Advantages of AGR-Lite

Under AGR-Lite, the revenue history and the insurance coverage are based on an individual's yields, product quality, and marketing history. AGR-Lite is based on a producer's production history, allowing revenue calculations to recognize local market prices that may differ and are perhaps higher than national average prices. High-value varieties that bring a premium over the average market price and products produced in a way that may bring a premium are also accounted for when calculating the operation's AGR from historical data. In this way, AGR-Lite provides revenue protection based on the yield, quality, cost, and price experience for each farm purchasing the product.

The example of a south-central Montana/north-central Wyoming farm demonstrates how AGR-Lite insurance can protect against both variable yields and changes in market price. Producers looking to add AGR-Lite to their risk management plan should first determine their risk management needs and whether AGR-Lite can meet those needs as a stand-alone product or used in conjunction with other insurance products. It is important to remember income received from crop insurance policies counts toward adjusting a producer's AGR.

Contact a local crop insurance agent for more information on AGR-Lite coverage. An agent can assist in developing a risk management plan and in determining the best coverage for a specific operation. For more information on this and other risk management topics on the Web, visit the Western Risk Management Library at http://agecon.uwyo.edu/riskmgt or the U.S. Department of Agriculture's Risk Management Agency at www.rma.usda.gov.

James Sedman is a consultant to the University of Wyoming Department of Agricultural and Applied Economics, John Hewlett is a farm and ranch management specialist in the department, and Duane Griffith is a farm management specialist in the Department of Agricultural Economics and Economics at Montana State University.

Table 1. AGR-Lite Coverage Level Information

Coverage Level (%)	Payment Rate (%)	Min. Commodities Required	Subsidy (%)
65	75	1	59
65	90	1	59
75	75	1	55
75	90	1	55
80	75	3	48
80	90	3	48

Table 2. Example Farm using AGR-Lite and MPCI	AGR-Lite	MPCI
Approved AGR	$290,000	
Approved Expenses	$150,000	
Trigger Level (75%)	$217,500	
Payment Rate (90%)	$195,750	
APH Yield (bushels/acre)		125
Coverage Level 75% (bushels/acre)		93.75
Payment rate (90%)		84.375

Table 3. Effects of Yield and Price Events	AGR-Lite Indemnity	MPCI Indemnity
Yield equals 75 bushels, $3.00/bushel price	$33,750	$40,500
Yield equals 75 bushels, $2.50/bushel price	$60,750	$33,750

[1] The RMA annual farm report form, in the AGR Standards Handbook, may be downloaded from the RMA Web site at www.rma.usda.gov/policies/agr-lite.html or may be obtained from your crop insurance agent.

[2] For further explanation of what are allowable income and expenses under AGR-Lite, consult your crop insurance agent or *Adjusted Gross Revenue-Lite: A Whole Farm Revenue Insurance Available in Wyoming* (Johnson, et al., 2007) available soon in the *Western Risk Management Library* (http://agecon.uwyo.edu/riskmgt).