

AGR-LITE IN KANSAS

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Introduction

The purpose of this paper is to introduce and discuss the AGR-Lite program, major limitations with current provisions, and its potential impact on risk reduction for Kansas producers. The paper will proceed with an introduction on risk management, risks faced by producers, and the current program. Subsequently the paper will present a brief introduction and overview of the AGR-Lite product including a short discussion of major limitations, and finally, concluding with an outline for future research, objectives, and an initial summary of data.

In today's production agricultural sector, managing risk is essential to insuring the economic well being and sustainability of successful enterprises. Farm managers purchase crop and livestock insurance as a means of insulating themselves from environmental and economic shocks, predominantly related to production, price, and revenue variability. Transferring production risk to insurance providers who are reinsured by the Risk Management Agency (RMA), establishes crop and livestock insurance as valuable risk management mechanisms. Government programs implemented through the Farm Service Agency (FSA) provide a stabilizing mechanism and limit the degree and severity to which producers experience variability in farm commodity prices. As of 2003, 22 RMA reinsured crop insurance plans exist, covering over 100 commodities and insuring over 218 million acres. Refer to Table 2 and Figure 2

for insurance product breakdowns. RMA has implemented plans to expand coverage to areas of agriculture currently without risk protection (e.g. livestock, greenhouses, and dairy to name a few). Introduced in 2001, Livestock Gross Margin (LGM) and Livestock Risk Protection (LRP) became the first federally reinsured livestock products available to producers. Despite their efforts, participation has struggled to reach sufficient levels. RMA has realized the need for an insurance product that expands protection on a whole-farm basis.

First implemented in 2001, Adjusted Gross Revenue (AGR) became the first revenue product insuring a percentage of average gross revenue for the entire farm. AGR provides coverage under one policy for multiple agricultural commodities. The motivation for AGR was to provide insurance based on current and historical tax records, specifically Schedule F 1040 filings or equivalent tax forms. With the use of federal tax records, RMA believes this approach will “reinforce program credibility by using IRS forms and regulations to ensure compliance.”¹ Currently, AGR is available in 18 states across the U.S. (primarily in the Northeast and on the West coast). However, USDA has frozen further expansion of the AGR product.

AGR-Lite

In 2003, Adjusted Gross Revenue-Lite (AGR-Lite) was introduced. This insurance product has a more simplified design continuing revenue protection for all crop and livestock enterprises. AGR-Lite was first developed by the Pennsylvania Department of Agriculture and is currently available in 18 states (AK, CT, DE, ID, MA, MD, ME, NC, NH, NJ, NY, OR, PA, RI, VA, VT, WA, WV) across the U.S with the imminent expansion to 15 states (CA, CO, FL, HI, KS, KY, MN, MT, NM, NV, ND, OH, SD, UT,

¹ <http://www.rma.usda.gov/pubs/2003/PAN-1667-06rev2.pdf>

WY). Figure 1 illustrates those states in which AGR-Lite is currently available as well as the potential expansion of 15 additional states. Those 15 states have received conditional approval to proceed with commodity rating. Pending approval of expansion, RMA hopes to introduce AGR-Lite (to the 15 states) for the 2007 insurance year. The expansion effort for Kansas has proceeded with the collaborative efforts of Frontier Farm Credit (FFC), Kansas State Department of Agriculture, RMA Regional Office-Topeka, Kansas Farm Management Association (KFMA), and Kansas State University. In addition, Kansas has received letters of support from Congressman Jerry Moran (R-KS), U.S. Canola Association, and Kansas Association of Wheat Growers.

To encourage participation, maximum total liability approved for AGR-Lite for insurance year 2006 was increased from \$250,000 to \$1,000,000. However, liability is still substantially less than the maximum liability currently offered by AGR (\$6,500,000). One other distinctive feature of AGR-Lite was the elimination of the livestock restriction. AGR limits the maximum share of livestock and livestock product revenue in the guarantee to 35%. Table 1 provides a comparison of the AGR and AGR-Lite programs. For further information on AGR and AGR-Lite refer to the following RMA websites:

- <http://www.rma.usda.gov/pubs/2003/PAN-1667-06rev2.pdf>
- <http://www.rma.usda.gov/pubs/2003/PAN-1667-07.pdf>

When comparing alternative insurance designs, AGR-Lite may be used as a standalone product or as an umbrella (wrap around) policy allowing producers to use AGR-Lite in conjunction with alternative crop insurance designs, excluding AGR. Farmer paid premiums will be reduced when producers purchase additional insurance

products, which reduce total liability. However, a producer may not accumulate indemnities from all insured products in excess of the total loss value.

Limitations of AGR-Lite specify that a qualifying person can generate no more than 50% of their total revenue from commodities purchased for resale. An example would be the purchase of grapes to be converted into wine. Potato revenue must not exceed 83.35% of their revenue stream. It is important to note the resale limitation does not apply to commodities purchased for further growth, such as stockers, cattle backgrounded, and fed cattle.

Producers are able to select from three coverage levels (65%, 75%, and 80%) of average gross revenue with an indemnity payment rate of 75% and 90%. For the higher coverage levels, qualifying persons must produce a minimum of three commodities. Furthermore, a calculation is performed establishing the minimum revenue to be generated from each enterprise. For 65% and 75% coverage levels producers must produce only one commodity. To be eligible for the 80% coverage level, producers must be engaged in the production of three or more commodities. Additional requirements for the policy demand that qualifying persons submit a minimum of five years of continuous, verifiable tax records for the same entity, preferably Schedule F 1040 filings or equivalent tax forms.

To encourage participation in AGR-Lite RMA pays 59%, 55%, and 48% of the total premium for coverage levels of 65%, 75%, and 80% respectively. Calculations for revenue guarantee are derived from a 5-year average gross revenue based on tax returns (with appropriate adjustments for changes in inventories and changes in farm size) times the producer's elected coverage level percentage. When a producer realizes a shortfall in

gross revenue, below the guarantee level, an indemnity is paid based on the producers selected payment rate percentage.

AGR-Lite provides protection for otherwise uninsurable commodities such as organic and direct marketed production; provides farm operations with a bottom line from severe economic loss; provides individual protection based on personal yield, price history, plus low price protection; and finally it may provide an alternative for farms with reduced APH caused by multiple years of crop losses.

AGR-Lite has two major limitations. First, AGR-Lite does not adjust for feed purchased. If it turns dry, and producers purchase hay to cover lost forage this loss may not be covered because it may not reduce gross revenue that is being insured but will result in lower net income. If producers normally sell excess hay, then it is covered because there will be reduced hay sales. Secondly, AGR-Lite does not include indemnity payments when calculating the 5-year average gross revenue which will set future guarantees. This has no impact on the current year's indemnity payment but it lowers the future guarantees thus reducing the effectiveness of AGR-Lite as a risk management tool when facing multiple years of drought.

Research Objectives

According to NASS census data for 2002, Kansas's top six commodities (by production value) account for \$8.65 billion or 98.8% of the state's agricultural production. However, only one of these commodities is currently insurable: Grains, attributing \$2.1 billion or 24% of Kansas's total agricultural production value. The uninsurable commodities in the top six (by production value) are cattle and calves, \$5.7 billion; hogs, \$297.5 million; milk and other dairy, \$248.5 million; hay and other

production, \$225 million; and nursery and greenhouse products, \$55.5 million. These uninsurable commodities account for \$6.55 billion or over 74% of agricultural production currently without risk protection. These statistics further substantiate the need for analysis of AGR-Lite in Kansas agriculture.

Given the previous statistics, the objective of research in the Department of Agricultural Economics will be to establish the impact of AGR-Lite on adjusted gross revenue of Kansas farms. Potential risk reduction associated with AGR-Lite will also be estimated. Farms will be broken into four categories allowing a more detailed evaluation of the impact of AGR-Lite on respective adjusted gross revenue and net farm incomes. Those categories include all farms; farms that have less than 50% of their gross revenue from beef cows or grazing, backgrounding, and/or finishing; farms with greater than 50% of their gross revenue generated from beef cows; and farms with greater than 50% of their gross revenue derived from grazing, backgrounding, and/or finishing. Using the Kansas Farm Management Data set, 13 years (1993-2005) of continuous farm data will be compiled and used to conduct the analysis.

Initial analysis of the descriptive statistics on 718 farms with continuous data from 1993-2005 covering the entire state, reveals substantial variability in gross income (Schedule F line 11). It is important to note that the following KFMA data does not reflect allowable income as defined by the AGR-Lite contract. The KFMA data set does indicate the relevant variability. However, as the data is refined to accurately reflect allowable income, variability is subject to change depending upon individual farms, type of program enrollment, and insurance plan participation. Once the correct measure of gross revenue is established research analyzing AGR-Lite will proceed. Average gross

income (Schedule F line 11) for the entire sample of all farm types was \$229,554 with a standard deviation of \$185,052. The minimum and maximum average gross values for the 718 farms are \$15,780 and \$1,776,173, respectively. Mean value of the standard deviations was \$59,313 with minimum and maximum values of \$5,858 and \$415,940. Further analysis will explore the impact of alternative coverage levels for AGR-Lite and the impact of combining traditional crop insurance with AGR-Lite. In addition, producer's willingness to pay for AGR-Lite will be examined.

Summary

AGR-Lite may be available for purchase by Kansas farmers in January 2007. This will provide another risk management tool that Kansas farmers may be able to use to manage risk. This product will also provide subsidized insurance for the first time to a large number of Kansas producers that are currently producing uninsurable crop and livestock commodities.

Table 1. Comparing AGR to AGR-Lite

Comparison	AGR ¹	AGR-Lite ²
Maximum Liability	\$6,500,000	\$1,000,000
Animal and Animal Product Limit	35%	N/A
Purchased For Resale*	<50%	<50%
Coverage Level (%)**	65, 75, 80	65, 75, 80
Payment Rate (%)	75, 90	75, 90
Government Subsidy (%)***	48, 55, 59	48, 55, 59

*Producer must generate no more than 50% of gross revenue from resale commodities. This does not include commodities purchased for further growth such as stockers, cattle backgrounded, and fed cattle.

**There are minimum commodity requirements for each of the coverage level percentages. Each commodity must generate a percentage of the total revenue stream. Refer to RMA fact sheets for further information.

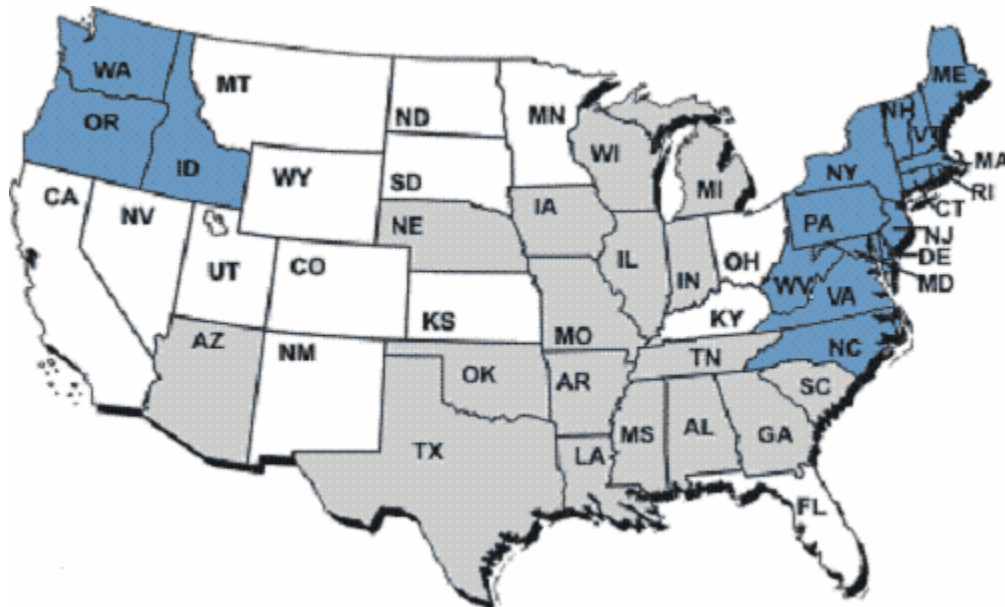
***Government subsidy levels are 48%, 55%, and 59% for coverage levels of 80%, 75%, and 65% respectively

Note: AGR is currently unavailable in Kansas and will not be available in the succeeding crop year

Source: USDA, RMA: ¹<http://www.rma.usda.gov/pubs/2003/PAN-1667-06rev2.pdf>

²<http://www.rma.usda.gov/pubs/2003/PAN-1667-07.pdf>

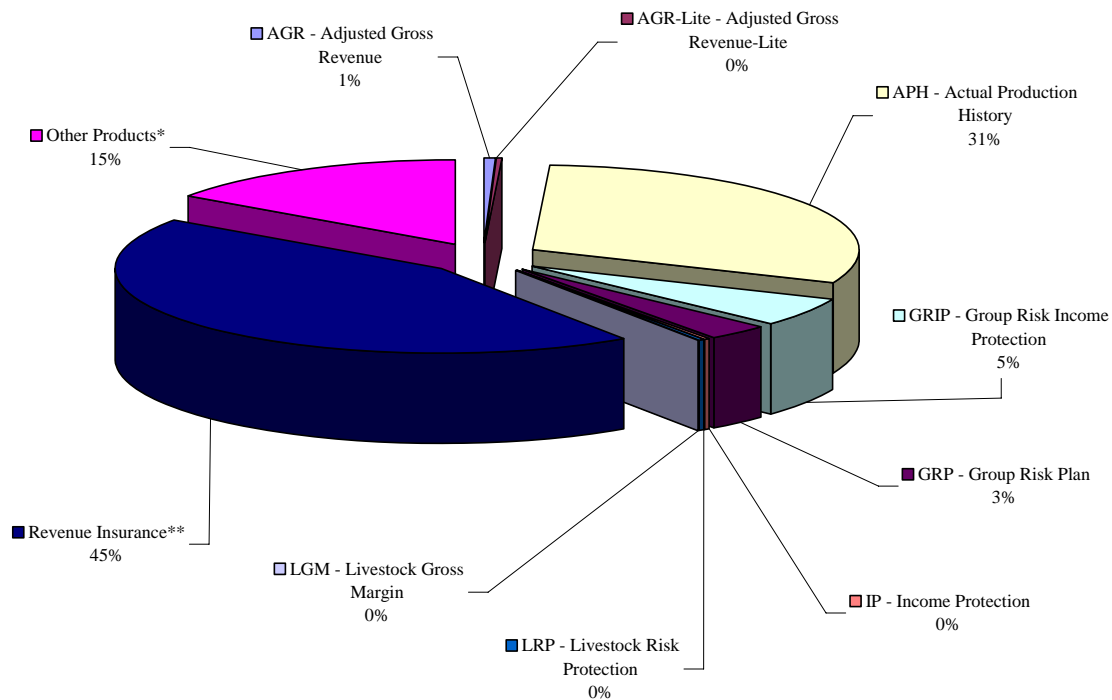
Figure 1. Current availability and proposed expansion of AGR-Lite



Note: States highlighted in blue represent those currently with AGR-Lite and those highlighted white correspond to states that received conditional approval to proceed with commodity rating. The other state approved to proceed with rating not illustrated above is Hawaii.

Source: <http://www.rainhail.com/products/productsAGR01.html>

Figure 2. Percent of dollar coverage across federally insured designs for 2005



Source: USDA, RMA at http://www3.rma.usda.gov/apps/sob/current_week/insplan2005.pdf
 USDA, RMA at http://www3.rma.usda.gov/apps/sob/current_week/lpi_insplan2005.pdf

Table 2. Breakdown of percent dollar coverage

Insurance Plan	Liability
AGR - Adjusted Gross Revenue	\$297,445,958
AGR-Lite - Adjusted Gross Revenue-Lite	\$13,179,779
APH - Actual Production History	\$13,661,425,953
GRIP - Group Risk Income Protection	\$2,423,948,305
GRP - Group Risk Plan	\$1,345,245,474
IP - Income Protection	\$123,445,790
LRP - Livestock Risk Protection	\$104,108,940
LGM - Livestock Gross Margin	\$51,303,923
Revenue Insurance**	\$19,649,457,241
Other Products*	\$6,752,645,360
Total	\$44,422,206,723

*Other Products Include: Aquaculture Dollar (AQU), Avocado Revenue Coverage (ARC), Dollar Plan (DOL), Indexed APH (IAPH), Indexed IP (IIP), Pecan Revenue (PRV), Tree Based Dollar Amount (TDO), Tobacco Guaranteed Production (TGP), Tobacco Quota (TQ), Yield Based Dollar Amount (YDO)

**Revenue insurance combines liability from Revenue Assurance (RA) and Crop Revenue Coverage (CRC).

Source: USDA, RMA at http://www3.rma.usda.gov/apps/sob/current_week/insplan2005.pdf
 USDA, RMA at http://www3.rma.usda.gov/apps/sob/current_week/lpi_insplan2005.pdf