

LIVESTOCK RISK PROTECTION – A NEW INSURANCE CONTRACT FOR CATTLE¹

The Risk Management Agency (RMA) has announced the release of the Livestock Risk Protection (LRP) contract for Kansas on feeder cattle. This new contract was released in early June but has many differences from the typical crop insurance contract that is re-insured by the RMA.

LRP does not guarantee the producer a cash price. The LRP contract is a single peril price risk contract. Effectively, it is an off board price derivative but for legal reasons it is referred to as an insurance product. Effectively, the way LRP works if a producer buys an \$80 per hundred weight guarantee and the market as measured by the Chicago Mercantile Exchange (CME) feeder cattle price index drops \$10 per hundred weight then the producer would receive an indemnity payment equal to \$10 per hundred weight times the total target weight of the livestock insured (less premium). If the producer sells the cattle in the cash market for \$70 per hundred weight then effectively the producer did achieve the \$80 guarantee. A producer received a \$10 indemnity payment plus \$70 per hundred weight in the cash market, for a total of \$80 (less premium). However, if the producer sells the cattle for \$65 in the cash market then his/her total revenue is \$65 from the cash sales plus the \$10 indemnity payment for a total of \$75. **This LRP contract does not guarantee the basis.** Therefore, one only has a total price guarantee if the cash selling price equals the CME index cash settlement value as reported on their web site.

Purchase of an LRP. Producers must first submit an application for an LRP contract. This application establishes the eligibility for the producer to purchase the LRP insurance contract. The primary condition is the producer must have a substantial beneficial interest in the livestock before they are eligible to purchase the LRP contract.

The LRP contract receives a 13 percent premium subsidy and the administrative and commission expenses are also paid by a separate subsidy. In a private insurance market one would not receive any premium subsidy and the purchaser would also have to pay for the administrative and operating cost of the insurance contract.

Not all insurance companies are writing the LRP contract. In addition, many insurance agents are not writing the LRP contract. Therefore, producers will need to locate an agent who is writing the LRP contract.

Once the person has located an agent that has been certified to write the LRP contract they will need to submit an application. Once the application has been accepted then the second step is the producer will need to submit a specific coverage endorsement (SCE) to initiate the LRP coverage on feeder cattle.

Producers must identify the number of feeder steers that are expected to be ready for market at 650 to 900 pounds. The producer would then choose the appropriate insurance period to reach the target weight ranging from 21 weeks to 30 weeks.

The producer will then select a coverage price for the period of the policy. The insured value will equal the number of head times the target weight times the coverage price times the ownership share. The total premium will equal the insured value times the rate. The 13 percent subsidy is then subtracted.

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The SCE must be submitted on line to RMA by an approved crop insurance agent, which gives the specific dollar per hundred weight guarantee and premium cost incurred. There are two reasons for this requirement. First, the guarantee and the premium cost vary daily. In addition, RMA has a limited amount of coverage that can be sold under the LRP contract. Therefore, once all of the liability/coverage has been sold no more contracts can be issued. However, if the demand is great enough to exceed the coverage allocated to this program, it will be interesting to see if Congress and the USDA decides to make more funds available for the LRP.

Producers may have multiple SCE's. In effect, they can buy the SCE coverage on parts of their herd over a period of weeks. Because the price guarantee and rates changed daily, it would not be unreasonable to expect producers will have several SCE's on shares of their livestock. Once the SCE is submitted through the RMA web site, the contract is approved and coverage will attach. Producers will then owe premium once coverage is confirmed.

LRP States. The feeder cattle contract is available in Kansas, Colorado, Iowa, Nebraska, Nevada, Oklahoma, South Dakota, Texas, Utah, and Wyoming. The fed cattle contract is available only in Iowa, Illinois and Nebraska. However, it is possible for Kansas producers to purchase a fat cattle contract if they are feeding the cattle in a Nebraska feedlot. What determines the eligibility for an LRP on fed cattle is the location where the cattle are being fed, not where the owner lives. The fed cattle contract is limited to 2,000 head per SCE although one may purchase an SCE with fewer head and a maximum of 4,000 head per crop year. Crop year is defined as July 1 through June 30. The feeder cattle LRP is limited to 2,000 head per crop year and 1,000 head per SCE.

Length of LRP Coverage. LRP has been approved for SCE feeder cattle coverages in 30 day increments from 13 weeks to 52 weeks. While the SCE for feeder cattle is authorized for up to 52 weeks, when checking the RMA web site, the current offer is a maximum of 30 weeks. Currently, the rating model used to set the LRP rates does not have sufficient data to rate contracts for a longer period of time. RMA is aware of this situation and has been looking at other rating methods that could possibly allow for coverage over a longer time frame. The longer time period would probably fit cow-calf producers better where they typically retain calves through weaning and backgrounding.

Market for LRP. This contract may be very attractive to certain classes of producers over a CME feeder cattle put contract. Producers may buy LRP only on the number of head they actually own and that may be fewer head than would be required for a CME contract. For example, if a full CME feeder contract represents about 67 head of 750 pound steers but the producer only has 50 steers then he/she would be able to purchase LRP on just the 50 steers.

Potentially this is a very large market because Kansas is an important beef cow/calf state. During 2002 there were 28,000 beef cow/calf operations in Kansas that produced 1.51 million calves. The bulk of these calves came from relatively small operations. During 2002, approximately 48 percent of Kansas calves were produced on farms that had a beef cow inventory of less than 100 head, and virtually all operations had fewer than 500 cows (table 1). This is the segment of the market that is most likely to purchase an LRP feeder cattle contract because the flexible contract size matches their operation as opposed to an option on feeder cattle futures that represents roughly 67 steers weighing 750 pounds. The LRP also allows producers the flexibility to buy incremental price protection on a few head at a time to secure an average minimum price. This is not a readily available alternative for small cow/calf operations using the Chicago Mercantile Exchange (CME) traded options.

LRP is an insurance contract because once purchased it can not be cancelled as can be done with a put option. Because it is an insurance contract with a specified insurance length it will be attractive for lending institutions who are lending money on cattle serving as collateral.

Because LRP is an insurance contract there is also no question that it is a tax deductible expense and would be included as a farm expense item. Options are also a tax deductible expense although some trading strategies sometimes are not considered deductible expenses.

One of the attractive features of LRP is that producers will be able to have their coverage accepted at the stated premium rate and guarantee as posted on the RMA web site. Because put options are traded in an active market, one may submit a purchase order at a specified premium but not get a fill on the contract. This is an even greater issue with put options that are on the deferred months. The deferred months are often thinly traded option markets and that increases the odds the order will not be filled. Even if the producer is purchasing an LRP contract, that will expire in 30 weeks or more, one will still have the contract filled. Many producers will probably prefer knowing the exact guarantee or premium cost at the time they submit their SCE. Coverage has attached as soon as the SCE has been accepted by RMA and a confirmation number is returned to the insurance agent.

One major advantage of the LRP is the 13 percent premium subsidy and there is no commission paid by the producer. The insurance agent commissions and operating expenses of the insurance company are all funded from a separate line item in the RMA budget.

Moral Hazard. There is little chance of moral hazard in the LRP contract simply because the contract is not tied to the individual's production level or price received. The payment is triggered totally on a market decline and that will affect everyone who has bought an LRP contract. For example, if 50 people purchased a 30 week contract today and the market declines by \$10, they would all receive a \$10 indemnity payment assuming they bought the same coverage level.

The number of head and the target weight are simply a way to determine eligibility for the contract. RMA does not want non-livestock producers purchasing the LRP contract because this is a subsidized product. Therefore the calculations used to determine the weight and the number of head are simply to verify LRP purchasers actually owned that number of head of cattle and approximate weight that was certified in the application.

Adverse Selection. The LRP contract may have the potential for limited adverse selection but it is very limited because of the length of time until expiration of the contract. The LRP contract is based on yesterday's market and premium cost. Therefore if the market closes down today, one will be able to purchase their LRP coverage not based on today's lower market price but yesterday's higher market price and associated premium costs.

This is similar to the situation with the loan deficiency payment that is based on a one day lag in the market. Farmers have traditionally made LDP claims on days when the market moves in their favor based on the previous day's market. However, in the marketing loan program for cotton there is a one week lag in the prices. Also farmers can take out the loan and effectively have a 60 day window to repay the loan and take advantage of a market that is moving in their favor. Those are certainly much longer time lags than available in the LRP contract which only has a single day lag.

Under normal market circumstances this is not a great advantage to producers. Other than an academic definition of adverse selection this one day lag is of little concern to RMA or the insurance industry. One scenario that would change this viewpoint is a catastrophic event in the cattle market. Examples might include: a disease outbreak such as "mad cow disease" or a bio terrorism act that would scare customers away from purchasing beef, limit exports and create other negative market impacts. Under this catastrophic market scenario one would expect the market to lock limit down if it is open when the event happens.

The question then becomes, if this were to occur, will producers be able to lock in LRP coverage and premium costs based on the previous day's market close before the current catastrophic event was bid into the market. It is also possible the catastrophic news might be revealed after the Chicago market closes. Under current procedure producers would have from market close until 8:00 p.m. central standard time to purchase their LRP coverage by submitting an SCE contract. In the event of a catastrophic market event it is possible RMA would shut off sales. However, there is some question how quick this might occur and producers might be able to get their SCE accepted before the system is shut off. It is unclear if there is a formal procedure for LRP offers following a lock limit down move. Presumably in the event of a lock limit down move there would be no SCE's offered the next day because the previous day was a lock limit down move.

Even without this limited adverse selection window producers may still want to consider an LRP contract just to protect themselves against such a catastrophic event. Because producers can buy coverages with higher levels of deductibles for lower premium costs, there may be producers willing to buy LRP just to protect against such a catastrophic event. If one buys an LRP contract with a high deductible, then if such an event were to occur the LRP contract would provide a significant indemnity payment.

From the "other side of the desk" this is also a major concern of private insurance company's and reinsurers. Unlike crop insurance where one gets geographic spread on the risk because not all yields will be a 100 percent loss, every LRP contract that is currently held will be paid. The losses could be significant because all contracts will have claims unlike the crop insurance contracts where only some contracts, even in the most severe drought, will have claims. Even those crop insurance contracts that do have claims will not all be 100 percent claims. For a given coverage level, the LRP indemnity payment will be the same for all buyers. It is likely LRP contracts will generate underwriting losses over 100% or 100% underwriting gains. This is very different from other forms of insurance.

Limitations on LRP. Currently the LRP is not available on heifers or breeds containing significant amounts of Brahma or dairy genetics. The other limitation on the LRP contract is that producers are not allowed to take an offsetting position in the futures market. For example, they buy an LRP contract on their cattle and then write a put option on the CME. Clearly, this is probably an unenforceable underwriting rule simply because producers could write the put option on their cattle that they do not have a SCE or they could simply open a speculative account.

Probably this underwriting rule effectively prevents marketing consulting firms from marketing their service to producers on how to extract the subsidy from the LRP contract. Remember this is suppose to be a risk management protection tool that will reduce the negative effects on producers' revenues caused by declining prices. In addition, most lenders who are financing cattle want the protection. They don't want producers simply extracting the subsidy because the subsidy is a very small amount of the total dollars at risk in a livestock operation.

The other major question is the rate fair? One would probably want to compare the premium cost of the LRP versus a premium cost of a CME put option. Future K-State analysis will analyze the rating of the LRP contract. The LRP contract premiums will be compared primarily with the CME put options but one must also remember the LRP contract is effectively a European put. There is no right to exercise an LRP nor can one cancel the LRP after it has been purchased. Producers have also voided the contract if they have simply taken an offsetting position on the CME, even if it is an unlikely that this underwriting rule can be enforced. In any case it is not recommended that a producer buy an LRP for the sole purpose to write puts against that LRP in order to extract the premium subsidy. The premium subsidy of 13 percent is a fairly small amount of the dollars compared to the price risk protection that is being covered.

There are many other risks that livestock producers are exposed to that the LRP clearly does not cover. Examples would include; death loss which can be a major cause of low or negative returns

from a backgrounding or cow/calf operation. Other major causes of financial losses would include poor performance, low weight gain caused by extreme weather conditions and the increased cost of feed for the livestock due to higher grain prices and the loss of grazing forages because of a drought year. RMA has been experimenting with various contracts that would cover loss of grazing forage but none of those pilots have been available in Kansas. There has also been some limited testing of private insurance contracts in Kansas that would hedge loss of grazing forage with the use of weather derivatives. These have been offered on a limited basis and usually to very large scaled producers. Potentially the weather derivative could be a way of providing risk management protection for grazing forage in regions such as the flint hills.

Recommendation to Producers. A reasonable management strategy certainly would be to submit an application for an LRP contract. This application through your insurance agent will establish the producers eligibility to attach coverage with the SCE later. This will allow producers to be in a position to put the coverage on should market conditions change or even potentially get an SCE approved after a major negative market announcement such as a disease outbreak. Because markets move so quickly, if producers don't already have the policy established it is unlikely they will have time to have the policy approved and in a position to submit the SCE in the event of a major negative market news event.

There is no cost for establishing the policy and one is only committed for premium after the coverage is attached by submitting the SCE. Therefore, there is little reason for cattle producers to not contact their crop insurance agent and establish the policy which makes them eligible to submit the SCE in the event that one becomes concerned about the price risk.

Clearly, the other approach is to create written market/risk protection strategy for livestock as many do with other commodities. The LRP could be a part of a written risk management plan that would protect against major losses in the cattle market. LRP will also leave the upside open so that if prices go higher producers will capture those returns less the premium they paid for the LRP contract.

TABLE 1. OPERATIONS WITH BEEF COWS, BY SIZE CATEGORY, SELECTED STATES, 2002.

State	1-49 Head	50-99 Head	100-499 Head	Less Than 500 Head	500+ Head	Total
CO	6,300	1,700	2,250	10,250	250	10,500
KS	18,600	5,200	4,020	27,820	180	28,000
NE	12,200	4,200	5,070	21,470	530	22,000
CO, KS & NE TOTAL	37,100	11,100	11,340	59,540	960	60,500

Source: USDA