# QUALITY ADJUSTMENT REVIEW

Risk Management Agency Product Development Division

#### Contracted Study By Milliman, USA



### **ARPA REQUIREMENTS**

"The Corporation shall contract with a qualified person to review the quality loss adjustment procedures of the Corporation so that the procedures more accurately reflect local quality discounts that are applied to agricultural commodities insured under this title. Based on the review, the Corporation shall make adjustments in the procedures, taking into consideration the actuarial soundness of the adjustment and the prevention of fraud, waste, and abuse."

### **ARPA REQUIREMENTS**

"...the Corporation shall offer producers the option of purchasing quality loss adjustment coverage on a basis that is smaller than a unit ..."

### CURRENT PROGRAM

The current procedure indemnifies producers for covered quality deficiencies using predetermined quality discount factors (DF). The discount factors are based on FSA loan discounts for crop years 1997 through 1999.

# Local & National Survey

- Individual grain terminals, elevators and warehouses.
  - Six major national grain buyers.

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- Requested current discount schedules.
- Discussed application of these schedules.

#### **Discounts at Local Elevators**

Quality discounts applied at local elevators can be highly influenced by supply and demand, and quality of the crop stored at the elevator or any other factor the local elevator applies.

Actual discounts may deviate from the elevator's published discount schedule.

## Survey Results

- Quality discount schedules are highly correlated within and across elevators in different regions.
- Most discount schedules are not updated frequently.
- Actual discounts (applied at the local level) may not follow the discount schedule.

### Results of Risk Analysis

- There was sufficient data to construct regional discount schedules only for the major crops.
- Discount schedules (for specific crops) were in no instance provided by the elevators.
- Only a handful of elevators had discount schedules for given crops.

### Cotton Quality Adjustment

#### Alternative Coverage

- (BALE-BY-BALE)
- Quality deficiencies are paid for each bale, even if there is no yield loss for the unit

Current Coverage

Aggregated across a unit

Production to count must be less than unit guarantee

### Cotton Risk Analysis

Risk analysis performed to estimate the difference in loss frequency and severity for coverage by bale instead of by unit.

- Coverage by bale leads to at least 10% higher indemnities.
- Contractor <u>strongly</u> recommends any changes be made on a pilot basis.

### Cotton by Bale - Rating Impact

- The study estimated premium rates would increase 10% nationwide, if quality adjustment was conducted on less than a unit basis.
- Preliminary analysis, along with expert judgment of the rates section suggests the actual rating impact may be significantly greater by region (i.e. Texas High Plains vs. California).

# Three Options Evaluated By Contractor

- Develop regional quality discount schedules.
- Allow producers to select a rate/factor.
- Follow discount schedules of terminal elevators.

#### **Study Recommendation**

Develop regional discount schedules:
Maintained by Regional Offices.
National in scope.
Uniform for all crops.
High maintenance costs.

# Study Also Recommends use of Olympic Average

Local transactions may deviate substantially from recommended discounts.

In such cases, determine quality discounts based on an Olympic Average (discard the high and low bid) of five separate local buying points.

#### RMA's Goals for QA

- The Quality Adjustment procedure must be: 1. Reflective of the local market price.
- 2. Easy to administer within current staffing levels.
- 3. Not subjected to price manipulation, fraud, waste and abuse.

# Pre 1995 Quality Adjustment Procedure

- Reflective of market price
  - $\clubsuit$  Actual value of grain  $\div$  local market price = QA factor
- Able to administer within current staffing levels

Adjuster made determinations on claim by claim basis at local level.

- Subject to price manipulation, fraud, waste, and abuse
  - Elevators could manipulate price based on supply and demand, or availability of insurance.

# In 1998–Current Quality Adjustment Procedure:

- Easy to administer
  - Predetermined factors published on the Special Provisions.
  - Factors only updated occasionally.
- Not subject to price manipulation, fraud, waste, and abuse
  - QA factor determined from charts (unless amount of damage is off chart).
- The Not always reflective of local market price
  - Factors are based on a five year average. Current years value and discounts are not considered (unless amount of damage is off chart).
  - QA factor can come from the SPOI charts even if local elevators are rejecting grain at the same level of damage.

# RMA Conclusion of Study Recommendation

- More closely reflects the local market discounts.
- Not subject to price manipulation, fraud, waste and abuse.
- Will be difficult to administer within current staffing levels.

# Recap

Three recommendations for quality adjustment:

- Pre-1995; Usually met 2 of 3, occasionally 3 of 3.
- Post-1995; Usually meets 3 of 3, occasionally 2 of 3.
- Contractor recommendation; would meet 2 of 3.

## Conclusion

Neither RMA nor the contractor has discovered a way to always meet all three mandated criteria:

- Reflective of local market.
- Easy to administer within current staffing levels.
- Not subjected to price manipulation, fraud, waste and abuse.

### **RMA** Recommendation

- Send study to producers, producer groups, universities, extension offices, and private industry.
- Ask for comments on the study and seek recommendations and ideas that would meet all three criteria.
- Seek recommendations and ideas on how to best insure cotton on a less-than-a-unit basis.

#### Who Do You Contact?

## Product Development Division Dave Bell (816) 926-2397

#### Thank You

For further information, please visit the Risk Management Agency website:

www.rma.usda.gov