# CROP INSURANCE PREFERENCES

<table>
<thead>
<tr>
<th>Crop Insurance Type</th>
<th>1998</th>
<th>1999</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT</td>
<td>33%</td>
<td>26%</td>
<td>-7%</td>
</tr>
<tr>
<td>Multi-peril (APH Buy-up)</td>
<td>53%</td>
<td>51%</td>
<td>-2%</td>
</tr>
<tr>
<td>Revenue (CRC, IP, RA)</td>
<td>12%</td>
<td>20%</td>
<td>+8%</td>
</tr>
<tr>
<td>Group Risk Plan (GRP)</td>
<td>2%</td>
<td>3%</td>
<td>+1%</td>
</tr>
</tbody>
</table>

The premium subsidy significantly influenced farmers’ decisions to upgrade from CAT to revenue products. Higher coverage means an increased likelihood of an indemnity, which reinforces the purchasing decision.
### PERCEIVED CHANCE OF COLLECTING ON 65% APH YIELD COVERAGE

<table>
<thead>
<tr>
<th>Crop</th>
<th>State</th>
<th>Irrigated Perceived</th>
<th>Irrigated Actual (95-98)</th>
<th>Dryland Perceived</th>
<th>Dryland Actual (95-98)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans</td>
<td>IN</td>
<td>5%</td>
<td>10%</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>MS</td>
<td>6%</td>
<td>52%</td>
<td>17%</td>
<td>60%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>NE</td>
<td>11%</td>
<td>9%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Grain</td>
<td>TX</td>
<td>15%</td>
<td>29%</td>
<td>27%</td>
<td>51%</td>
</tr>
<tr>
<td>Sorghum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn</td>
<td>IN</td>
<td>5%</td>
<td>13%</td>
<td>14%</td>
<td>31%</td>
</tr>
<tr>
<td>Corn</td>
<td>NE</td>
<td>12%</td>
<td>10%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Cotton</td>
<td>MS</td>
<td>4%</td>
<td>33%</td>
<td>10%</td>
<td>38%</td>
</tr>
<tr>
<td>Cotton</td>
<td>TX</td>
<td>19%</td>
<td>25%</td>
<td>33%</td>
<td>58%</td>
</tr>
</tbody>
</table>

SOME PRODUCERS DRASTICALLY UNDERESTIMATE THEIR CHANCES OF RECEIVING AN INDEMNITY; THIS COULD EXPLAIN LOW PARTICIPATION IN SOME AREAS.
### Effectiveness of RM Strategies

<table>
<thead>
<tr>
<th>Risk Management Strategy</th>
<th>Effectiveness (1=low – 5=high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being a low-cost producer</td>
<td>3.7</td>
</tr>
<tr>
<td>Maintaining financial reserves</td>
<td>3.6</td>
</tr>
<tr>
<td>Diversification</td>
<td>3.3</td>
</tr>
<tr>
<td>Forward pricing</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Crop Insurance</strong></td>
<td><strong>2.9</strong></td>
</tr>
<tr>
<td>Off-farm investments</td>
<td>2.9</td>
</tr>
<tr>
<td>Off-farm employment</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Some farmers perceive crop insurance as less effective than other strategies. This survey was taken during the current low-price environment. It is also important to note that off-farm employment is a very effective form of risk management for many farmers, yet is not viewed as effective.
FARM PRICES HAVE DECLINED OVER TIME

On average, corn prices have been falling at the rate of $0.12/bushel per year.

If historic trends continue, it is likely that farmers will face declining incomes. Insurance cannot solve this problem. Unfortunately, the profit margin needed to pay for insurance will decline. This was a strong consideration in offering a premium discount - to make insurance more affordable during a forecasted decline in farm income.
SUMMARY SO FAR

• FCIC’S PROGRAM HAS GROWN TREMENDOUSLY - RMA IS COVERING AN INCREASING AMOUNT OF THE ECONOMIC VALUE OF AMERICAN AGRICULTURE. HUGE GROWTH POTENTIAL REMAINS.

• IF HISTORIC TRENDS CONTINUE, FARM INCOME WILL DECLINE OVER TIME. WITH LESS INCOME, FINANCIAL RISKS WILL INCREASE. RISK MANAGEMENT BECOMES INCREASINGLY IMPORTANT.

• FACTORS AFFECTING THE PURCHASING DECISION INCLUDE: RISK, COSTS, & PERCEPTIONS. PERCEPTIONS DO NOT ALWAYS MATCH THE REAL WORLD DATA.

• THE QUESTION IS: WHERE DO WE GO FROM HERE: A HUGE NEED STILL EXISTS, BUT LARGE BUDGETS DON’T. NOW WHAT? THIS IS THE ISSUE FOR THE BOARD.
LOOKING FORWARD - PRODUCT DEVELOPMENT AND DELIVERY.

Key Questions for the Future

Are we meeting our customers needs? Do we have an effective strategy in place. Are controls adequate? Do our employees have the tools and skills they need?

What is the state of the insurance industry? Are returns adequate? How is the RMA-FCIC/Industry Relationship?

Can they service and sell the product? Will they service and sell the product? Are agents the appropriate delivery channel (e.g., DOPP)?

Who wants the product? What is the value of the product? Ultimately, does the product meet the customer’s needs? These questions are answered by the customer and product segmentation. What do we know about who buys the product and why? What about those who don’t?
WHERE DO WE GO WITH NEW PROGRAM DEVELOPMENT IN THE FUTURE?

• OF THE TOP 50 CROPS BY NATIONAL VALUE, 44 ARE COVERED:
  – 29 ARE COVERED BY PERMANENT PROGRAMS;
  – 7 ARE COVERED BY A PILOT PROGRAM;
  – 5 ARE PLANNED FOR INTRODUCTION IN 2002;
  – 2 ARE PLANNED FOR INTRODUCTION IN 2003;
  – 1 IS PLANNED FOR INTRODUCTION IN 2004;

• CAVEAT: MOST OF RMA’S BUDGET GOES TO MAINTAINING WHAT WE HAVE AND THIS IS BECOMING INCREASINGLY DIFFICULT. NEW PRODUCTS IMPLEMENTATION MAY SLIP.
HOW LONG DOES IT TAKE TO DEVELOP A PROGRAM?

- RMA estimates for past internally developed products show a range:
  - Up to 36 months for a more complex single-crop program such as cabbage.
  - As little as 10 or 11 months for smaller-scale single-crop programs such as mustard and crambe.
  - Average 19 months for 15 programs studied (all single-crop programs except FL fruit trees @ 28 months).
  - More complex, broader-scope programs take longer.

- Then the pilot program is tested 3 to 5 years before becoming permanent.

- The discussions we have today will influence the program for many years.
CONTRACTING OUT NEW PRODUCT DEVELOPMENT

- RMA is contracting out new product development to:
  - Leverage resources by utilizing more public and private sector entities,
  - Accelerate the development of new programs, and
  - Provide opportunities for greater expertise and innovation in the development process.

- Expanded private industry involvement
- Research council and academia involvement
- Pre-release review sessions (one final check to make sure our products meet our customers’ needs before the products are released)
- But none of this will matter if there isn’t money to operate the program.
RECOGNIZING THIS BUDGET SITUATION, RMA ANNOUNCED IN THE FALL OF 1998 THAT IT NEEDED TO APPROACH PRODUCT DEVELOPMENT BY LOOKING AT TWO DIFFERENT SEGMENTATIONS.

By Crop Grown:

- Insurance policies by crop type are our expertise. The largest crop segments are now covered. As RMA has expanded in lesser value crops, the potential for market distortion has grown.
- Further expansion into new crops should focus on aggregated crop policies based not on the individual crop, such as the adjusted gross revenue policy.
- We do not have the resources to do anything else both well and timely.

By Farm Size or Type:

- The economics of small farms is very different from those of large farms. Small farms are (in general) less financially-viable than large farms.
- For example, CAT provides little protection for limited-resource farmers who need it the most.
- The goal of this segmentation is to better ensure we serve the needs of all our current and potential customers.
- We’ve asked Congress to let us try to do this for limited resource farmers.
POSSIBLE IMPROVEMENTS: GREATER RECOGNITION OF REGIONAL PRICE DIFFERENCES.

WHAT THIS MEANS IS THAT AT A GIVEN COVERAGE LEVEL, AN EASTERN OR WESTERN FARMER CAN INSURE LESS OF THE VALUE OF THEIR CROP THAN AN MIDWEST FARMER. TO COVER THE SAME PERCENTAGE, THESE FARMERS WOULD HAVE TO BUY HIGHER COVERAGE LEVELS AT A HIGHER PREMIUM RATE.
EXAMPLE OF COVERAGE IN TWO REGIONS - CORN FARMERS W/ EQUAL APH, RISKS, AND FINAL YIELDS

<table>
<thead>
<tr>
<th>MINNESOTA</th>
<th>PENNSYLVANIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRICE ELECTION: $2.36</td>
<td>PRICE ELECTION: $2.36</td>
</tr>
<tr>
<td>LOCAL PRICE: $2.36</td>
<td>LOCAL PRICE: $2.90</td>
</tr>
<tr>
<td>65% COVERAGE, 100 Bu/Ac APH, 100 ACRES</td>
<td>65% COVERAGE, 100 Bu/Ac APH, 100 ACRES</td>
</tr>
<tr>
<td>FINAL YIELD: 50 Bu/Ac</td>
<td>FINAL YIELD: 50 Bu/Ac</td>
</tr>
<tr>
<td>EXPECTED CROP VALUE = (100)(100)($2.36)=$23,600</td>
<td>EXPECTED CROP VALUE = (100)(100)($2.90)=$29,000</td>
</tr>
<tr>
<td>HARVESTED CROP VALUE = (50)(100)($2.36) + (INS:) (15)(100)(2.36) = $15,340</td>
<td>HARVESTED CROP VALUE = (50)(100)($2.90) + (INS:) (15)(100)(2.36) = $18,040</td>
</tr>
<tr>
<td>LOSS = $8,260</td>
<td>LOSS = $10,960</td>
</tr>
</tbody>
</table>

THE PA. FARMER SUFFERS THE GREATER LOSS BECAUSE THE INSURED PRICE (WHICH DETERMINES INDEMNITIES) IS LESS THAN THE LOCAL PRICE. THE PA FARMER WOULD HAVE TO BUY HIGHER COVERAGE, AT HIGHER COST, TO HAVE THE SAME LOSS. RMA NEEDS TO FACTOR IN REGIONAL PRICE DIFFERENCES.
POSSIBLE STRATEGY FOR REGIONAL PRICE ELECTION PILOT

CONCEPT:

• CONSTRUCT A PILOT PRICE ELECTION PROGRAM THAT RECOGNIZES REGIONAL DIFFERENCES IN PRICES TO DETERMINE IF INCREASED SALES OCCUR.

IMPLEMENTATION:

• ESTABLISH A NATIONAL PRICE ELECTION AS IS CURRENTLY DONE. THIS ELECTION WOULD BE THE MINIMUM ELECTION AVAILABLE TO A FARMER.

• FOR THOSE FARMERS IN AREAS WITH HIGHER PRICES, INDEX THE NATIONAL PRICE ELECTION TO THE LOCAL CONDITIONS.

• THE GOAL IS NOT TO HURT REGIONS WHERE CURRENT ESTIMATES ARE ACCURATE - THE CORN BELT, FOR EXAMPLE.

• THE INDEX COULD BE BASED ON HISTORIC NASS SEASON AVERAGE PRICES RECEIVED BY STATE OR FSA COUNTY LOAN RATE OR FSA COUNTY POSTED PRICES.
POSSIBLE TEST REGIONS FOR EVALUATING REGIONAL CORN PRICE ELECTIONS.

Areas in orange and red could be piloted for testing regional price elections. Current national price elections underestimate the value of corn in these areas. Areas in green would not be penalized. Confusion over this point could pose problems.
POSSIBLE IMPROVEMENTS: BETTER FORAGE INSURANCE OPTIONS

• FORAGE IS HARVESTED IN EVERY STATE AND THIS COULD BE A MEANS TO REACH LIVESTOCK PRODUCERS.

• FARMERS HARVESTED 60 MILLION ACRES IN 1998 - CROP VALUE WAS $ 11.7 BILLION IN 1998

• CORN AND SOYBEANS ARE ONLY CROPS WITH MORE HARVESTED ACRES AND GREATER VALUE

• THE PROBLEM IS: HOW DO YOU MEASURE GRASS GROWTH?

Source: ERS(97) and Agricultural Statistics (99)
A CROP INSURANCE POLICY FOR FORAGE BASED ON WEATHER

- RMA ALREADY SELLS WEATHER-BASED INSURANCE, BUT WE DON’T CALL IT THAT. WEATHER IS THE PRIMARY CAUSE OF LOSS FOR RMA PRODUCTS (DROUGHT, EXCESS MOISTURE, FREEZES, ETC.).
- FORAGE IS A DIFFICULT CROP TO INSURE DUE TO LACK OF YIELD DATA - CURRENT STATUTES FOCUS ON YIELDS.
- RMA IS EXPLORING A POLICY THAT WOULD INSURE A MINIMUM AMOUNT OF RAINFALL DURING THE GROWING SEASON - ENOUGH TO GROW GRASS. IN ESSENCE, THIS IS DROUGHT INSURANCE - NOT RAINFALL INSURANCE.
- AGRICORP IN ONTARIO, CANADA INTRODUCED A RAINFALL PILOT PROGRAM THIS SPRING
- 855,000 FARMERS RAISE CATTLE, FOR EXAMPLE, AND HAVE NO FCIC PRODUCT THAT SERVES THEM WELL. THIS IS ONE WAY TO REACH THESE FARMERS.
POSSIBLE IMPROVEMENT: COST OF PRODUCTION INSURANCE

- RMA is assisting Agrilogic, Inc., at their request, to develop a Cost of Production (COP) insurance program by providing data and policy co-ordination.
- Joe Davis, President of Agrilogic, presented the COP concept to RMA.
- Agrilogic has targeted a pilot program for the 2001 crop year, pending development work.
- Aggregated policies - those which serve many farmers at once are not only more efficient, but can help avoid market distortions.
ISSUES FOR BOARD DISCUSSION

• GENERAL THOUGHTS - DOES THIS APPROACH OF PURSUING POLICIES THAT SERVE MANY FARMERS AT ONCE MAKE SENSE (IT WILL BE HARD)?

• WHAT DO YOU THINK ABOUT REGIONAL PRICES DIFFERENCES?

• COST OF PRODUCTION INSURANCE?

• DROUGHT INSURANCE FOR PASTURE OPERATIONS?

• DO THE PROPOSED PRIORITIES MAKE SENSE?