



United States Department of Agriculture

Farm and Foreign Agricultural Services
Risk Management Agency

INFORMATIONAL MEMORANDUM: R&D-99-016

TO: All Reinsured Companies
All Risk Management Agency Field Offices

FROM: Tim B. Witt
Deputy Administrator

SUBJECT: Proposal--Coverage Enhancement Option (CEO)

BACKGROUND:

To provide the best possible Farm Safety Net to agricultural producers, the Federal Crop Insurance Corporation (FCIC) and its partners in the private insurance sector must continue to explore alternatives that provide producers the option to choose coverages that best fit their individual needs.

A growing variety of insurance products are now available. In addition, at least nine reinsured companies offer supplemental insurance products that are not reinsured or subsidized by FCIC, but that increase the range of choices available to producers.

One of the more common supplemental products is generically called a "disappearing deductible." Nine reinsured companies are estimated to offer some form of disappearing deductible product on one or more crops and in one or more States. These products are marketed under different trade names with variations in coverage. However, such supplemental insurance products are not available on many of the approximately 100 crops insured by FCIC. Also, for crops that are insured, coverage may not be available in all States.

Because of the potential value to producers of such products, the Risk Management Agency (RMA) has begun an analysis of the feasibility of offering such a product on those crops where such coverage is not offered by the private sector. It is believed that such a product potentially could be attached to many policies reinsured by FCIC and would provide growers a valid alternative to increase the total amount of insurance coverage. This type of product may provide a strong incentive for insureds to buy-up from the CAT level to higher coverage levels. For now, the conceptual product has been given the working name "Coverage Enhancement Option (CEO)" and is described in the attachment.



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The Risk Management Agency Administers and Oversees
All Programs Authorized Under the Federal Crop Insurance Corporation

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RMA does not intend to test or offer CEO on any crop/plan/State on which a similar private product is available. The following crops and plans, among others might be considered for pilot testing. Other crops might also be possible candidates.

<u>Crop</u>	<u>Plan</u>
Apples	GYC
Canola	APH
Citrus Fruit	DOL
Citrus Trees	DOL
Cranberry	APH
Grapes	GYC
Potatoes	APH
Rice	APH
Stone Fruit	APH
Walnuts	GYC

RMA is seeking comments from comments from reinsured companies and other interested parties on the feasibility of pilot testing for the CEO concept as early as the 2000 crop year..

ACTION:

Insurance providers and other parties wishing to comment on CEO and its suitability for the FCIC program are requested to send written comments not later than April 26 to:

Mr. Nelson Maurice
Risk Management Agency, USDA
Senior Underwriter
P. O. Box 419293
Kansas City, Missouri 64141

Phone: (816) 926-7394
Fax: (816) 926-1803
E-mail: Nelson_Maurice@rm.fcic.usda.gov

Insurance providers and other parties wishing to participate in the development of this product or wishing additional information on CEO may contact Mr. Maurice, Mr. David Clauser at (816)926-3854, or Mr. William Klein at (816) 926-2704.

DISPOSAL:

This Informational Memorandum is for the purpose of transmitting information and the expiration date is December 31, 1999.

Attachment

Concept Paper: Coverage Enhancement Option (CEO)

Producers often complain that they cannot obtain enough protection. They want higher coverage levels and higher price elections. However, they also do not want to pay greater premiums.

Many MPCCI policies are designed to cover the expected value of a normal crop less a deductible of 15% to 50%. The smaller the deductible, the higher the premium rate. Table No. 1, presents an example for a perennial crop with an expected crop value of \$100,000. (Rates are available because coverage is currently offered at the 85% level on this crop.)

Table No. 1: Coverage & Cost Example for a Perennial Crop

Coverage	Total	Producer	Producer
85%	\$85,000	2.86%	\$2,431
80%	\$80,000	2.42%	\$1,936
75%	\$75,000	2.06%	\$1,545
70%	\$70,000	1.69%	\$1,183
65%	\$65,000	1.32%	\$858
60%	\$60,000	1.33%	\$798
55%	\$55,000	1.06%	\$583
50%	\$50,000	0.86%	\$430
CAT	\$27,500	- - -	\$60 (fee)

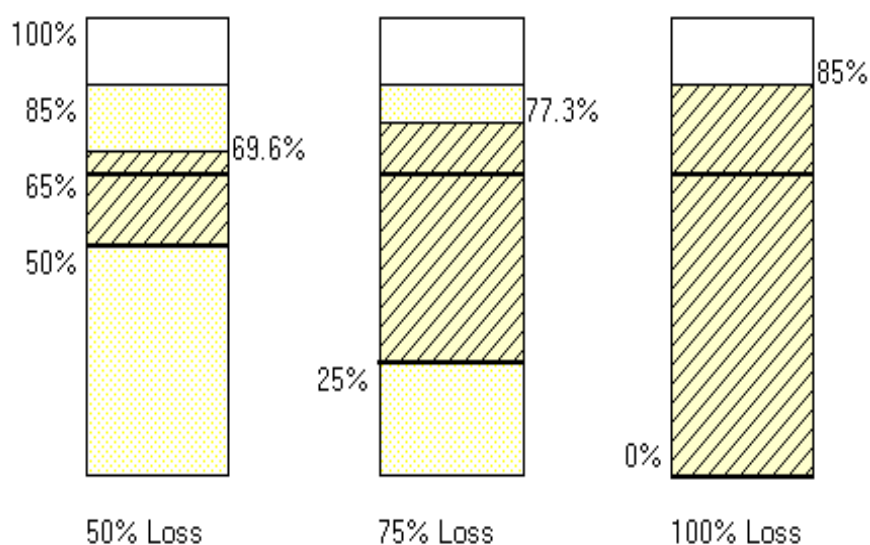
Note that producer premium for the highest level is almost three times that of the 65% level, which is an obstacle to convincing farmers to insure themselves at higher coverage levels.

One way of alleviating this situation may be to offer a Coverage Enhancement Option (CEO), which would function as follows.

1. The insured chooses a coverage level for the basic portion of the policy, say 65%. This will be called the "basic coverage level;"
2. The insured chooses a higher coverage level for the option say 85%. This will be called the "option coverage percentage;"
3. The basic coverage level (65% in this case) is controlling in the sense that no indemnity is paid unless the actual crop yield is less; and

4. Once indemnities are triggered, the coverage level is enhanced in proportion to:
- The percent of damage that is payable under the basic portion of the policy; and
 - A coverage factor, which is the ratio of the option coverage percentage to the basic coverage level, minus 100%.

Three examples are presented and illustrated below. They assume a basic coverage level of 65% and an option coverage percentage of 85%.



Example No. 1: The crop produced is only 50% of normal. In this case, the effective coverage is enhanced by 4.6% to 69.6% as follows.

- The amount of damage (in percentage terms) under the basic coverage is 65% minus 50%, or 15%.
- The coverage factor $((85/65)-1)$, which is 30.77%.
- The effective increase in coverage is 30.77% times 15%, or 4.6%.
- Thus, the insured will receive an indemnity equal to 19.6% of the value of the crop instead of the 15% that would have been paid.

Example No. 2: The crop produced is now only 25% of normal. In this case, the effective coverage is enhanced by 12.3% to 77.3% as follows.

- A. The amount of (in percentage terms) under the basic coverage is 65% minus 25%, or 40%.
- B. The coverage-level factor is the same in each example.
- C. The effective increase in coverage is 30.77% times 40%, or 12.3%.
- D. Thus, the insured will receive an indemnity equal to 52.3% of the value of the crop instead of the 40% that would have been paid.

Example No. 3: The crop produced is now zero. In this case, the effective coverage is enhanced by 20% to 85% as follows.

- A. The amount of damage (in percentage terms) under the basic coverage is 65% minus zero, or 65%.
- B. The coverage factor is unchanged.
- C. The effective increase in coverage is 30.77% times 65%, or 20%.
- D. Thus, the insured will receive an indemnity equal to 85% of the value of the crop instead of the 65% that would have been paid.

The CEO option still requires the insured to incur a deductible, which eliminates small but costly-to-administer claims, but then causes the deductible to be recovered once insurance indemnities are triggered. The whole deductible is not recovered at once, but rather gradually as the percent of damage increases. The rate at which the additional amount is paid is set such that the maximum allowable amount is recovered when there is a total loss. In the case of FCIC-reinsured policies, the maximum coverage allowed is 85% of the expected crop value.

The advantage of CEO is that it lowers the cost of insurance as the premium rate for the basic coverage level is applied to the entire amount of insurance. This can be seen in Table No. 2. It takes the example used in Table No. 1, and assumes that at each level below 85%, the producer buys enough CEO to bring the total coverage up to \$85,000.

Table No. 2: Examples of Combined Basic and CEO Coverage for a Perennial Crop

Basic Covg Level	- Coverage Amounts -			- Premiums -			- Savings -	
	Basic	CEO	Total	Gross	Subsidy	Farmer	Amount	Percent
85%	85,000	0	85,000	3,144	713	2,431	0	0%
80%	80,000	5,000	85,000	2,806	713	2,093	338	14%
75%	75,000	10,000	85,000	2,551	713	1,838	593	24%
70%	70,000	15,000	85,000	2,296	713	1,583	848	35%
65%	65,000	20,000	85,000	2,041	713	1,328	1,103	45%
60%	60,000	25,000	85,000	1,871	713	1,158	1,273	52%
55%	55,000	30,000	85,000	1,701	713	988	1,443	59%
50%	50,000	35,000	85,000	1,616	713	903	1,528	63%
CAT	27,500	0	27,500	522	522	0	0	0%

The premium rate for CEO is the same as the rate for the basic coverage level. This is because losses begin to be paid at the same trigger point and because rate is a function of (among other things) the trigger point. (A "trigger point" is the point at which indemnities begin to be paid; that is, 100% minus the deductible percentage.)

Because the MPCCI program's rate structure is different for different crops, and because this will have an impact on the amount of savings that can be generated, a second example is presented in Table No. 3. This is for a grain crop with an expected crop value of \$100,000. (Rates are available because coverage is also offered at the 85% level on this crop.)

Table No. 3: Examples of Combined Basic and CEO Coverage for a Grain Crop

Basic Covg Level	- Coverage Amounts -			- Premiums -			- Savings -	
	Basic	CEO	Total	Gross	Subsidy	Farmer	Amount	Percent
85%	85,000	0	85,000	10,200	1,388	8,812	0	0%
80%	80,000	5,000	85,000	8,415	1,388	7,027	1,785	20%
75%	75,000	10,000	85,000	6,630	1,388	5,242	3,570	41%
70%	70,000	15,000	85,000	5,270	1,388	3,883	4,930	56%
65%	65,000	20,000	85,000	4,250	1,388	2,863	5,950	68%
60%	60,000	25,000	85,000	3,825	1,388	2,438	6,375	72%
55%	55,000	30,000	85,000	3,400	1,388	2,013	6,800	77%
50%	50,000	35,000	85,000	3,145	1,388	1,758	7,055	80%
CAT	27,500	0	27,500	1,018	1,018	0	0	0%

Three more tables are presented below to compare the costs of using CEO in different circumstances. The first shows the situation faced by a CAT insured considering moving to "50/100" plus CEO. The second shows the situation faced by an insured considering "85/100" coverage versus "65/100" plus CEO. The third table shows the situation faced by an insured at the "65/100" level considering adding CEO.

Table No. 4a shows that the grower of a perennial crop can move from CAT to "50/100" plus CEO and increase insurance coverage by \$57,500 for only \$863 of additional cost. For a grain grower, the same \$57,500 coverage increase would cost an additional \$1,718 in premium.

Table No. 4b shows that the grower of a perennial crop could choose "65/100" plus CEO instead of straight "85/100", receive the same total amount of coverage (with a lower trigger point) and save \$1,105 in premiums. For the grain grower, choosing "65/100" plus CEO instead of straight "85/100" generates a savings of \$5,950 in premiums.

Table No. 4a: Comparison-- CAT versus "50/100" plus CEO

Crop	--- CAT ---		-- 50/100 + CEO --		Differences	
	Protection	Cost	Protection	Cost	Protection	Cost
Perennial	27,500	60	85,000	923	57,500	863
Grain	27,500	60	85,000	1,778	57,500	1,718

* A \$20 fee is included on the buy-up policies; \$60 on CAT.

Table No. 4b: Comparison-- "85/100" versus "65/100" plus CEO

Crop	--- 85/100 ---		-- 65/100 + CEO --		Differences	
	Protection	Cost	Protection	Cost	Protection	Cost
Perennial	85,000	2,433	85,000	1,328	0	(1,105)
Grain	85,000	8,813	85,000	2,863	0	(5,950)

* Fees are the same for all policies on this table and are ignored.

Table No. 4c: Comparison-- "65/100" versus "65/100" plus CEO

Crop	--- 65/100 ---		-- 65/100 + CEO --		Differences	
	Protection	Cost	Protection	Cost	Protection	Cost
Perennial	65,000	848	85,000	1,328	20,000	480
Grain	65,000	1,863	85,000	2,863	20,000	1,000

* Fees are the same for all policies on this table and are ignored.

Finally, Table No. 4c shows that the grower of a perennial crop could add CEO to a "65/100" policy and receive \$20,000 more in coverage at the cost of an additional \$480 in premium. For the grain grower, the additional \$20,000 in coverage would cost \$1,000 more in premium.

The numbers presented in this paper are meant as examples only. The actual costs and savings will depend on the exact crop insured and the county in which it is grown.

CEO could possibly have a positive impact on participation and increase the levels of coverage purchased by producers. Whether it will have a greater impact at the bottom or the middle of the coverage-level chart depends on comparisons such as those presented above. The comparative differences between these two crops reflects the different risk situation faced by each, which is built into the MPC rate structure.

CEO offers several benefits as follows:

1. The additional premium is low when compared to simply buying higher coverage levels. For example, for the perennial crop example, basic coverage at the 65% level plus CEO was 45% less expensive than simply buying coverage at the 85% level.
2. The availability of CEO may tend to promote greater participation in the crop insurance program and will encourage producers to better protect themselves by buying more coverage.
3. CEO could be implemented very quickly since it requires little or no additional rate work, information, data processing, or special handling.