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# Risk Management Options Using the Common Crop (Combo) Policy in Wyoming: An Irrigated Farm Example

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#### Introduction

Beginning with the 2011 crop year, the United States Department of Agriculture's (USDA) Risk Management Agency (RMA) introduced an initiative to combine and simplify crop insurance. RMA released the Common Crop Insurance Policy Basic Provisions and related Crop Provisions as the insurance policy basis for crop insurance coverage. The new policy is widely described as the COMBO Policy because it explicitly combines APH revenue and APH yield insurance in one general policy and creates a single APH revenue program for each of the commodities that are eligible for APH-based revenue coverage.

The COMBO Policy is available for crops for which revenue insurance products were previously offered by RMA. Such revenue insurance has never been offered for many crops. However, those other crops have been, and continue to be, covered by other products, including APH-based yield coverage, dollar insurance plans, and area based insurance plans.

The purpose of this bulletin is to illustrate the use of the COMBO Policy in the context of a representative Wyoming farm that grows crops on irrigated land. The farm consists of 600 acres on which barley, sugar beets, peas, and alfalfa hay are raised. A COMBO Policy is available for barley, but not for the other crops. The other crops can be covered by APH yield plans. The indemnity benefits and premium costs of the COMBO Policy plans and other insurance plans are illustrated through a series of three production and price scenarios that are designed to illustrate the key features of the COMBO Policy plans.

# The COMBO Policy

The COMBO Policy combines the Actual Production History (APH), Crop Revenue Coverage (CRC), Revenue Assurance (RA), Income Protection (IP), and Indexed Income Protection (IIP) polices into one policy structure.

Price discovery is required for APH revenue protection and in several cases is based on futures market contracts for the subject commodity (as with corn, wheat and canola). For a commodity such as barley which does not have a futures contract, price discovery is based on the futures market contracts for a commodity whose price is sufficiently closely linked to the price of the crop of interest; for example, corn futures contracts form the basis for price discovery for feed barley in the barley APH revenue contract.

Crops covered by APH Plans that do not have revenue protection are not included in the COMBO Policy.

Any person at risk of in crop production may purchase crop insurance to protect themselves against loss. Landlords with crop share leases may purchase insurance for their shares of crops, as can the tenants. A tenant with a cash lease on cropland can purchase crop insurance on 100 percent of a crop. An owner-operator with a 100 percent share in the crop can purchase insurance for an entire crop. For simplicity, in this policy paper, a person who is the owner-operator of 200 acres of cropland and is a tenant with a cash lease on an additional 400 acres of cropland is referred to as the *farmer* and purchases crop insurance on 100 percent of the crops.

#### The Structure of the COMBO Policy

The Common Crop or COMBO Policy has a single set of basic provisions that supports the following plans of insurance for crops for which a commodity futures market exchange price discovery mechanism is used:

1. **Yield Protection Plan**: This is an APH policy in which the farmer selects a yield coverage level for a crop which establishes a *payment yield* (the *coverage level* multiplied by the farmer's APH yield) and receives an indemnity when the current year's yield for the crop falls

below the *payment yield*. The price used to value the yield shortfall for indemnity purposes is the same price (based on price discovery through futures contracts in the relevant commodity exchange) used in the revenue protection plans to establish the expected revenue per acre at the time insurance under those plans is obtained (that is, when the farmer signs up for coverage). The Yield Protection Plan provides protection against yield shortfalls.

- 2. Revenue Protection with the Harvest Price Exclusion: This is the basic revenue insurance plan in the COMBO Policy in which insurance coverage is not increased if the harvest time based futures contract price for the crop rises between the time the insurance coverage is purchased and harvest time (as defined in the policy). Producers have to opt out of having their insurance increased when the *harvest time price* exceeds the *projected harvest price*.
- 3. **Revenue Protection Plan:** This is the basic revenue insurance plan in the COMBO Policy in which, if commodity exchange prices (associated with the relevant futures contract) increase over the period between when the policy is purchased and harvest time (as defined in the policy), the amount of insurance coverage

is also increased. Therefore, the Revenue Protection Plan includes the Harvest Price Endorsement. Under the Revenue Protection plan, the farmer receives protection against either yield losses or price declines, or combinations of yield and price changes that cause per acre revenues to decline sufficiently to trigger indemnity payments.

The links between APH revenue and yield policies offered before 2011 and the revenue and yield protection plans now available under the COMBO Policy are shown (Table 1).

Nationally, the Common Crop or COMBO Policy is available for the following crops: barley, canola/rapeseed, corn, cotton, grain sorghum, malting barley, rice, soybeans, sunflowers, and wheat. Full details of the COMBO Policy are described in detail in Agricultural Marketing Policy Paper No. 37, July 2012, Agricultural Marketing Policy Center, Montana State University. Separate APH, Dollar and area-based insurance products are available for other crops for which revenue protection insurance is not offered.

Table 1: Links between Revenue/Yield APH Programs Prior to 2011 and the COMBO Policy

Historical (pre 2011) Policies			<b>COMBO Policy Plans</b>
a	APH Yield (with CAT coverage		Yield Protection (with CAT
	endorsement)		coverage available)
b	Revenue Protection with no Harvest		
	Price Endorsement		Revenue Protection with
c	Income Protection	$\longrightarrow$	Harvest Price Exclusion
d	Indexed Income Protection		(replaces b, c, d, and e)
e	Catastrophic Income Risk Protection		
f	Crop Revenue Coverage		Davanua Protection (with
			Revenue Protection (with Harvest Price Endorsement)
g	Revenue Assurance with Fall		that replaces f and g
	Harvest Price Option		that replaces I and g

#### The Wyoming Example Farm

The example farm is assumed to be located in Park County, Wyoming, where most crop production occurs on irrigated land. The farmer is therefore assumed to manage 600 acres of irrigated cropland. Some 200 acres are owned by the operator. The farmer has a cash lease for the other 400 acres of irrigated cropland leased from a neighbor. As a result, the farmer has a 100 percent interest in all crops raised on the farm and, therefore, is the only party that can insure these crops. The farmer choses to insure all acreage planted to all of the crops grown on the farm.

The farm's crop mix for 2012 and the applicable APH yields for each crop are presented (Table 2). The APH yields are representative of actual yields obtained by producers in Park County and the crop mix is quite typical.

Table 2: Planted Crop Acres and Applicable APH Yields for 2012

Crop	Planted Acres	Applicable APH
Malting Barley	230	100 bushels
Sugar Beets	240	22.2 tons
Dry Beans	90	20.9 hundredweight
Alfalfa for Hay	40	3.5 tons
Total	600	

COMBO Policy insurance plans are only available for crops that also have revenue insurance available. On the example farm, COMBO Policy plans are only available for the feed barley portion of malting barley insurance coverage, which consists of a basic feed barley COMBO contract with a malting barley endorsement (in this case malting barley rider Option A, which can be used by farmers who plan to sell their crop on the open market or who have a

contract with a maltster such as Coors or Anheuser Busch). 1

The other crops planted by the farmer can all be insured under APH yield contracts. Under these contracts the farm establishes an APH yield for each crop and selects a coverage level (ranging from 55 percent to 75 percent or 85 percent, depending on the crop and practice) which establishes a trigger or payment yield (the APH yield multiplied by the coverage level). The farmer receives an indemnity when the farm's actual yield falls below the payment yield. Losses (the difference between the trigger yield and the actual yield) are valued at an elected price, chosen by the farmer, which may range from 30 percent to 100 percent of the RMA established price for the crop. Many operators select the 100 percent price election option and in the case of the example farm, the farmer is assumed to select that option.

In Wyoming and other states, the crops for which APH plans are available can also be covered by other products such as area—based yield plans or, in the case of a productive alfalfa hay stand in Wyoming, a Pasture, Range, Forage (PRF) Vegetation Index plan. However, many farmers prefer to use APH insurance plans rather than area based insurance plans, and so these area-based alternative options are not considered in this paper. Assuming that the farmer only considers an APH protection for crops other than barley, the options available to the example farm are as described (Table 3).

<sup>&</sup>lt;sup>1</sup> Details of how malting barley can be covered using RMA malting barley rider options A and B are provided in MSU Agricultural Marketing Policy Briefing Paper 90, *Malt Barley Production, Brewer Demand, and Crop Insurance Options*, by Vincent H. Smith and Tony Cookson, September 2007, available at: www.ampc.montana.edu/briefings/briefing90.pdf.

Table 3: Alternative Insurance Plan Options by Crop for the Park County Example Farm

Crop	Insurance Product
Malting Barley <sup>A</sup>	COMBO Yield Protection Plan COMBO Revenue Protection Plan with Harvest Price Exclusion COMBO Revenue Protection Plan with Harvest Price Endorsement
Sugar Beets	Actual Production History (Yield)
Dry Bean	Actual Production History (Yield)
Alfalfa for Hay	Actual Production History (Yield)

A In each case, the malting barley contract consists of the COMBO revenue option for feed barley and the RMA Option A malting barley quality endorsement.

In the past, farmers have often chosen to insure their crops at the optional unit level (section by section). However, in recent years, RMA has approved substantial increases in premium discounts for farms that insure at the enterprise unit (whole farm) level or basic unit level (all sections insured under the same crop share arrangements). As a result, more farmers are insuring at the enterprise level or, where the enterprise level is not available in a plan. at the basic unit level. The farmer on the example farm insures malting barley at the enterprise level and the other crops at the basic unit level. In addition, under the COMBO and APH policies, farmers can chose different coverage levels and price elections. The Park County example farm is assumed to select a 75 percent coverage level and a 100 percent price election.

The COMBO Policy offers three plan options for barley insurance, as described and summarized above (Table 3). However, the COMBO Yield Protection plan has the same structure as APH plans (other than the way in which the price at which losses are valued is determined). Hence, to illustrate the key innovative features of the COMBO Policy, in the simulations presented below, the example farm is assumed to consider only the COMBO *Revenue Protection* and *Revenue Protection with Harvest Price Exclusion* plans.

Details of the resulting insurance plan options (unit, coverage level, and price election choices) selected by the example farm for each crop are presented (Table 4).

Table 4: Choices of Insurance Coverage by Crop for the Park County Example Farm

		Coverage Level	Price Election
Insurance Coverage	<b>Unit Selection</b>	( percent)	( percent)
Revenue Protection with Harvest Price	Enterprise	75	100
Exclusion (Barley)			
Revenue Protection (Barley)	Enterprise	75	100
Actual Production History (Sugar Beets)	Basic	75	100
Actual Production History (Dry Beans)	Basic	75	100
Actual Production History (Alfalfa Hay)	Basic	75	100

Table 5: Insured Prices and Payment Yields for Each Crop and Insurance Plan

Crop	Insurance Coverage	Insured Price	Payment Yield
Malting Barley	Revenue Protection with Harvest Price Exclusion	\$5.37 per bushel	75 bushels
Malting Barley	Revenue Protection	\$5.37 per bushel	75 bushels
Sugar Beets	Actual Production History	\$59.85 per ton	16.7 tons
Dry Beans	Actual Production History	\$0.44 per pound	1,568 pounds
Alfalfa for Hay	Actual Production History	\$112 per ton	2.63 tons

The resulting *payment yields* and projected harvest prices at which liabilities are established for each crop by plan are shown (Table 5).

# The Example Farm's Insurance Strategies

Given the insurance plans being considered for each crop (Table 4), two alternative overall insurance strategies is considered for the example farm:

Strategy A: COMBO Revenue Protection with Harvest Price Exclusion (plus the Option A malt barley endorsement) for barley and APH protection for all other crops, all with 75 percent coverage and 100 percent price elections.

Strategy B: COMBO Revenue Protection (plus the Option A malt barley endorsement) for barley and APH protection for all other crops, all with 75 percent coverage and 100 percent price elections.

The amount of protection obtained by the farm for each crop at the sign up date under each strategy is shown (Table 6). For all plans expect the Revenue Protection plan, these amounts are the example farm's crop specific *insurance liabilities* or

maximum indemnities and represent the indemnity payments the farm would receive if the crop experienced a 100 percent loss. Under a Revenue Protection plan for a crop, if the crop's harvest price is higher than its projected harvest price then the farm's liability or maximum indemnity will be increased and equal its payment yield multiplied by the harvest time price (with a cap on the allowable increase equal to twice the projected harvest price).

Premiums paid by the example farm for the coverage obtained for each crop under strategies A and B are presented (Table 7). These are the *producer paid premiums*, or out-of-pocket cost to the producer for the insurance coverage purchased. The *producer paid premium* for a crop equals the *total premium* minus the *premium subsidy* for each crop which is paid by the federal government. Details of total premiums and premium subsidies for each of the example farm crops are presented in the Appendix (Tables A1 and A2).

Under Strategy A, producer paid premiums for all crops are \$8,497; under Strategy B, they are \$8,727. Strategy B has a higher premium cost for producers than Strategy A because Revenue Protection has a higher premium cost than Revenue Protection with Harvest Price Exclusion.

Table 6: Insurance Liabilities for the Insurance Choices Considered for the Example Park County Farm

Crop	Insurance Coverage	Insurance Liability: Strategy A <sup>2</sup>	Insurance Liability: Strategy B <sup>2</sup>
Malting Barley <sup>1</sup>	Revenue Protection with harvest Price Exclusion	$$92,633 + $21,125 = $113,758^{A}$	
Malting Barley <sup>1</sup>	Revenue Protection		\$92,633 + \$21,125 = \$113,758 A,B
Sugar Beets	Actual Production History	\$ 239, 161	\$ 239, 161
Dry Beans	Actual Production History	\$ 62,093	\$ 62,093
Alfalfa for Hay	Actual Production History	\$ 11,783	\$ 8,837

Liability for barley has two components. The first is the liability that is obtained at sign up from the selected COMBO Policy plan. The second is the liability obtained from the malting barley endorsement (in this case, Option A).

Table 7: Producer Premiums for the Insurance Choices Considered for the Example Park County Farm

Crop	Insurance Coverage	Producer Premiums: Strategy A	Producer Premiums: Strategy B
Malting Barley	Revenue Protection with Harvest Price Exclusion	\$ 1,090 + \$ 600 = \$1,690	Not Used
Malting Barley	Revenue Protection	Not Used	\$ 1,320 + \$ 600 = \$ 1,920
Sugar Beets	Actual Production History	\$3,975	\$3,975
Dry Beans	Actual Production History	\$2,537	\$2,537
Alfalfa for Hay	Actual Production History	\$ 295	\$295
Total Producer Premium Payments		\$8,497	\$8,797

<sup>&</sup>lt;sup>2</sup> With the exception of the COMBO Revenue Protection plan, these liabilities represent the maximum indemnities or payments the farmer can receive for each plan under the insurance coverage the farmer selected for the example Park County farm. For malting barley, the liability is split between potential losses resulting from the COMBO plan feed barley revenue coverage (the larger values) and potential losses associated with crop failing to meet malting barley quality requirements. Under Revenue Protection, as discussed above, if the harvest time price exceeds the projected harvest price at the sign up date, then liability will be increased proportionally (and equal the payment yield multiplied by the harvest time price), with a limit on liability established by capping the increase in price at twice the projected harvest price.

Premiums are more expensive under the COMBO Revenue Protection plan because Revenue Protection provides increased liability when prices increase between planting time and harvest time (the projected harvest price is lower than the harvest price) while Revenue Protection with the Harvest Price Exclusion does not offer such protection. As a result, in some years, as illustrated below, Revenue Protection will provide the farmer with larger indemnities than Revenue Protection with Harvest Price Exclusion

#### **Production/Price Scenarios**

Different crop insurance strategies have different costs and benefits. The differences in producer premium costs between Strategy A and Strategy B have been shown. To illustrate the differences in benefits and net returns, we consider three different production/price scenarios.

Production: In Scenarios 1 and 3, the farm experiences a loss of irrigation water because of severe drought that substantially reduces in-stream flow in the water courses for which the farm has water rights and also creates heat stress on the crops. The result is that production is only 60 percent of the farm's APH yield for each crop. In Scenario 2, the farm also experiences a drought, but the effect on production is less severe and the yield for each crop is 75 percent of the farm's APH yield. In all three scenarios, barley fails to meet the required standards for malting quality.

Prices: For crops covered by APH contracts, or for crops covered by a COMBO Yield Protection plan, differences between the *harvest time price* for a crop and the price at which the farm insured its crop at planting time have no impact on liabilities or indemnities for the crop. For crops insured under the COMBO Revenue Protection and Revenue Protection with Harvest Price Exclusion, differences between the RMA-established *harvest time price* and the *projected harvest price* do affect indemnities and, for Revenue Protection, liabilities. In Scenario 1, therefore, the *harvest time price* for

barley is assumed to identical to the *projected harvest price* for barley (\$5.37 per bushel). In Scenario 2, the *harvest time price* for barley is assumed to be \$4 per bushel, substantially lower than the *projected harvest price* of \$5.37 per bushel. In Scenario 3, the *harvest time price* for barley is assumed to be \$7 per bushel, substantially higher than the *projected harvest price* of \$5.37.

In summary, the three production/price scenarios are:

Scenario 1: Yields are 60 percent of their APH for all crops. The harvest time price for barley is \$5.37.

Scenario 2: Yields are 75 percent of their APH for all crops. The harvest time price for barley is \$4.00.

Scenario 3: Yields are 60 percent of their APH for all crops. The harvest time price for barley is \$7.00.

#### **Simulation Results**

Scenarios 1, 2, and 3 results are presented (Tables 8, 9, and 10 respectively). The estimated indemnities for each crop, total indemnities received for all crops, total premium payments (from Table 7) and net indemnities (total indemnities – premium payments) under scenarios 1-3 for the two insurances strategies (Strategy A and Strategy B). The insurance plans for sugar beets, dry beans, and alfalfa hay are identical in those two strategies and the malting barley quality endorsement is also identical (the farm selects Option A). However, in Strategy A, the farmer uses Revenue Protection without the Harvest Price Option and in Strategy B, the farmer uses Revenue Protection (which includes the Harvest Price Option).

In all three scenarios, drought causes the farmer's barley to fail to meet malt quality standards and so in each scenario and under each strategy he receives the maximum indemnity payment of \$21,125 under the malt barley quality endorsement.

In Scenario 1, in which yields are 60 percent of the farm's APH for each crop and the harvest time *price* for barley is identical to its projected harvest price of \$5.37 per bushel the farm receives the same indemnity of \$18,527 for its barley yield loss under both Strategy A and Strategy B as coverage levels and price elections (75 percent coverage level and 100 percent price election) are the same under both strategies. Indemnities received for yield losses under the APH contracts for sugar beets, dry beans and alfalfa are also identical under both strategies and so total indemnities are also identical for Strategies A and B (\$103,011). However, premium costs are \$300 higher under Strategy B than under Strategy A and, as a result, in Scenario 1 net indemnities are \$300 lower under Strategy B (\$94,214) than under strategy A (\$94,514).

In Scenario 2, drought is less severe and yields are 75 percent of the farm's APH for each crop. Under Strategy A, therefore, the farm receives no indemnities for losses for sugar beets, dry beans or alfalfa hay. This is because the farm's *coverage* 

*level* for each crop is also 75 percent and so the farm's *payment yield* (which serves as the trigger for losses) equals the farm's realized yield for each crop.

However, in Scenario 2, the harvest time price for feed barley of \$4 is lower than the *projected harvest price* of \$5.37. Under both the *Revenue Protection* with Harvest Price Exclusion Plan and the Revenue Protection Plan, the farm's per acre insurance guarantee will therefore be the projected harvest price of \$5.37 multiplied by the payment vield for barley of 75 bushels (the farms APH yield for barley of 100 bushels per acre multiplied by the selected coverage level of 75 percent) or \$402.75 per acre. The farm's *revenue to count*, however, is its realized yield of 75 bushels multiplied by the harvest time price of \$4, or \$300 per acre. Thus the farm receives a per-acre indemnity of \$102.75 and an indemnity payment of \$23,635 for losses on the 230 acres planted to barley. Total indemnities are therefore identical under both insurance strategies and equal \$44,760.

Table 8: Scenario 1, Indemnities, Producer Premiums, and Net Indemnities

	Strategy A (Revenue Protection with Harvest Price Exclusion for barley)	Strategy B (Revenue Protection for Barley)
<b>Indemnities by Crop Insurance Plan</b>		
Barley:		
Feed Barley COMBO Indemnity	\$18,527	\$18,527
Malt Barley Quality Indemnity	\$21,125	\$21,125
Sugar Beets	\$48,550	\$48,550
Dry Beans	\$12,435	\$12,435
Alfalfa Hay	\$2,374	\$2,374
<b>Total Indemnities</b>	\$103,011	\$103,011
<b>Producer Premium Payment</b>	\$8,497	\$8,797
<b>Total Net Indemnities</b>	\$94,514	\$94,214

Table 9: Scenario 2, Indemnities, Producer Premiums, and Net Indemnities

	Strategy A (Revenue Protection with Harvest Price Exclusion for barley)	Strategy B (Revenue Protection for Barley)
Indemnities by Crop Insurance Plan		
Barley:		
Feed Barley COMBO Indemnity	\$ 23,635	\$ 23,635
Malt Barley Quality Indemnity	\$ 21,125	\$ 21,125
Sugar Beets	\$ 0	\$ 0
Dry Beans	\$ 0	\$ 0
Alfalfa Hay	\$ 0	\$ 0
<b>Total Indemnities</b>	\$ 44,760	\$ 44,760
Producer Premium Payment	\$ 8,497	\$ 8,797
Total Net Indemnities	\$36,363	\$36,063

Again, because the premium for Revenue Protection is \$300 higher than for Revenue Protection with Harvest Price Exclusion, net indemnities are \$300 lower under Strategy B than Strategy A in Scenario 2. Note that had the farmer selected a COMBO Yield Protection plan, in which payments are triggered only when the realized yield for the crop falls below its payment yield, the farmer would not have received an indemnity on the COMBO feed barley portion of its coverage (as was the case for the other crops covered by APH contracts that are essentially very similar to the COMBO Yield Protection plan).

In Scenario 3, the *harvest time price* per bushel for feed barley of \$7 is higher than its *projected harvest price* of \$5.37 and, because of severe drought, all crop yields are only 60 percent of their APH yields. Under the *Revenue Protection* plan for barley, therefore, the farm's *insurance guarantee* for

barley *increases* to \$525 per acre (the barley *harvest time price* of \$7 multiplied by the farm's payment yield of 75 bushels per acre). However, under the Revenue Protection with Harvest Price Exclusion plan per acre insurance guarantee remains \$402.75. In both cases, the revenue-tocount per acre is \$420, the harvest time price, \$7 per bushel, multiplied by the realized yield of 60 bushels per acre (60 percent of the barley APH yield of 100 bushels per acre). Under the Revenue **Protection** plan (Strategy B) the farm therefore receives a per acre indemnity of \$105 (the insurance guarantee of \$525 per acre - revenue to count of \$420 per acre) and an *indemnity payment* for barley of \$24,150 (230 acres x \$105 per acre). However, under the Revenue Plan with Harvest **Price Exclusion**, the farm receives no indemnity because its insurance guarantee of \$402.75 per acre is less than the revenue-to-count of \$420 per acre.

Table 10: Scenario 3, Indemnities, Producer Premiums, and Net Indemnities

	Strategy A (Revenue Protection with Harvest Price Exclusion for barley)	Strategy B (Revenue Protection for Barley)
Indemnities by Crop Insurance Plan		
Barley:		
Feed Barley COMBO Indemnity	\$0	\$24,150
Malt Barley Quality Indemnity	\$21,125	\$21,125
Sugar Beets	\$48,550	\$48,550
Dry Beans	\$12,435	\$12,435
Alfalfa Hay	\$2,374	\$2,374
<b>Total Indemnities</b>	\$84,484	\$108,634
Producer Premium Payment	\$8,497	\$8,797
Total Net Indemnities	\$75,987	\$99,837

Thus, in Scenario 3, under Strategy A, total indemnities are \$84,484 and substantially lower than under Strategy B, where they amount to \$108,634. Net indemnities are substantially higher under Strategy B (\$99,837) than under Strategy A (\$75,987) because the farm's Revenue Protection Plan's premium is only \$300 higher than the premium for the Revenue Protection Pan with Harvest Price Exclusion.

## **Summary**

The Common Crop Insurance Policy, also called the COMBO Policy provides producers of barley, canola/rapeseed, corn, cotton, grain sorghum, malting barley, rice, soybeans, sunflowers, and wheat with revenue or yield protection, establishing projected harvest prices through the use of futures prices prior to the sign up dates for those crops. Two revenue policies are available as competing options: Revenue Protection (the basic revenue

policy) and Revenue Protection with Harvest Price Exclusion. Both policies establish an initial insurance guarantee using the same *projected harvest price* for the eligible crop at the insurance sign-up date, but if the commodity's *harvest time price* exceeds its *projected harvest price* then, under Revenue Protection, the insurance guarantee is increased. The simulations presented in this briefing paper show the following characteristics of the COMBO Policy:

• When the *projected harvest price* is higher than the *harvest time price* for the insured commodity then both the Revenue Protection Plan and the Revenue Protection Plan with Harvest Price Exclusion generate the same indemnity for the producer (as long as the same coverage level and price election are selected).

- When the harvest time price is higher than the projected harvest price for the insured commodity then, if an indemnity is available, the indemnity paid under the Revenue Protection Plan will be larger than the indemnity paid under the Revenue Plan with Harvest Time Price Exclusion (which may be zero, as demonstrated in Scenario 3).
- The producer paid premium under the Revenue Protection Plan will be larger than the producer paid premium under the Revenue Plan with Harvest Time Price Exclusion.

• The COMBO *Yield Protection Plan* is very similar to the *APH Plan* offered for commodities for which no revenue plan is available.

The Revenue Protection Plan provides larger indemnities than the Revenue Plan with Harvest Time Price Exclusion under some circumstances (when *harvest time prices* exceed *projected harvest prices*), but involve higher premium costs for producers. Producers should therefore carefully compare the potential indemnity benefits of the two revenue protection plans against their premium costs, as well as the potential benefits and costs of the Yield Protection Plan, in making their decisions about insuring eligible crops

# **Appendix**

Table A1: Total Premiums for the Insurance Choices Considered for the Example Park County Farm

Crop	Insurance Coverage	Total Premiums Strategy A	Total Premiums Strategy B
Malting Barley	Revenue Protection with	\$ 4,739 + 1,333 =	
	Harvest Price Exclusion	\$ 6,072	
Malting Barley	Revenue Protection		\$ 5,740 + 1,333= \$ 7,073
Sugar Beets	Actual Production History	\$ 8,834	\$ 8,834
Dry Beans	Actual Production History	\$ 5,638	\$ 5,638
Alfalfa for Hay	Actual Production History	\$ 677	\$ 677

Table A2: Premium Subsidies for the Insurance Choices Considered for the Example Park County Farm

Crop	Insurance Coverage	Premium Subsidy Strategy A	Total Subsidy Strategy B
Malting Barley	Revenue Protection with	\$ 3,469 + 733 =	
	Harvest Price Exclusion	\$4,202	
Malting Barley	Revenue Protection		\$ 4,420 + 733 = \$ 5,153
Sugar Beets	Actual Production History	\$ 4,859	\$ 4,859
Dry Beans	Actual Production History	\$ 3,101	\$ 3,101
Alfalfa for Hay	Actual Production History	\$ 382	\$ 382



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