# $m{A}$ griculture & $m{B}$ usiness $m{M}$ anagement

St



# Notes ...

#### **Multi-Peril Crop Insurance -- A Drought Management Tool**

#### Quick Notes...

Farmers face risks of adverse events, including drought, which has the potential of reducing crop yields and/or quality.

To provide financial protection farmers often use crop insurance as a part of their risk

Multi-peril crop insurance is another tool management can use to reduce the risk of financial losses due to drought and low crop yields. This type of insurance coverage is available for a substantial number of spring crops produced in Colorado -- including apples, barley, corn, dry beans, grain sorghum, oats, onions, peaches, potatoes, popcorn, sugar beets, sunflowers and wheat. Sign up dates for spring planted crops are March 1 for onions and April 30 for most other spring crops. Catastrophic coverage (50%) is available for only \$50 per crop from your local Farm Service Agency (FSA) or your insurance agent.

Additional coverage may be purchased for up to 75% of the grower's actual yield history and 100% of price election. Under a new policy, farmers can now purchase multiperil insurance with production guarantees

and premium rates based on their own yield records. Since coverage must generally be purchased in advance to planting, interested growers should check with the local Farm Service Agency office or insurance agent to determine the final sign-up date for crops in their area.

Worksheet 1 has been developed to facilitate the analysis of multi-peril crop insurance on net cash flow with and without crop insurance in a typical year and in a disaster year. Insurance premiums can be obtained from local insurance agents offering multi-peril insurance coverage.

Table 1 contains the crops eligible for crop insurance coverage by county for 1996. The keys to this analysis are accurate determination of the costs of production of the given crop, fixed costs, family living, and debt service requirements of the business. Secondly, the ability of the producer to bear risk -- that is the overall liquidity of the business. The question asked is if a loss occurs does the business have sufficient cash reserves to cover the loss and continue the business for another year. The worksheet can assist in this evaluation of the feasibility and benefits of multi-peril insurance coverage.

## Worksheet 1

### ANALYSIS OF PER ACRE NET CASH FLOW

Crop:	 _
Situation:	

	Typical Y	ear	Disaster Year		
	With	Without	With	Without	
	Insurance	Insurance	Insurance	Insurance	
Projected Crop Sales and Other Cash Inflows:					
1. Enter yield/planted acre	\$	\$	\$	\$	
2. Enter expected market price of crop at harvest time	\$	<u>\$</u>	<u>\$</u>	<u>\$</u>	
3. Expected sales: Line 1 x Line 2	\$	<u>\$</u>	<u>\$</u>	<u>\$</u>	
4. Enter other receipts (deficiency pmt., straw, etc.)	\$	<u>\$</u>	<u>\$</u>	<u>\$</u>	
5. Total receipts: Line 3 + Line 4	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	
MPCI Premium					
6. Enter insurance yield		XXX		XXX	
7. Enter level of coverage (0.50, 0.65 or 0.75)		XXX		XXX	
8. Enter premium rate for the desired level of coverage		XXX		XXX	
9. Enter crop price election	<u>\$</u>	<u>\$ XXX</u>	<u>\$</u>	\$ XXX	
10. Insurance premium: Line 6 x Line 7 x Line 8 x Line 9	<u>\$</u>	<u>\$ XXX</u>	<u>\$</u>	<u>\$ XXX</u>	
Projected Crop Cash Requirements					
11. Enter preharvest cash operating expense	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	
12. Enter harvest cash expense for yield on line 1	\$	<u>\$</u>	<u>\$</u>	<u>\$</u>	
13. Enter debt service, family living, and other fixed cash requirements	\$	<u>\$</u>	<u>\$</u>	<u>\$</u>	
14. Total cash requirements: Line 11 + Line 12 + Line 13	\$	\$	\$	<u>\$</u>	
Projected MPCI Payment Received					
15. Enter Line 6 x Line 7		XXX	- <u></u> -	XXX	
16. Enter Line 15 - Line 1 (enter a zero if answer is a negative number)		XXX		XXX	
17. Insurance payment received: Line 16 x Line 9		XXX		XXX	
NET CASH FLOW: Line 5 - Line 10 - Line 14 + Line 17	\$	\$	\$	\$	

#### Crop Insurance Programs in Colorado Counties for 1996 Crop Year

COUNTY	BARLEY	BEANS	CORN	GRAIN SORGHUM	FORAGE	OATS	ONION	POTATO	SUGAR BEET	SUN FLOWER	WHEAT
ADAMS	X	X	X	X			X	X	X	X	X
ALAMOSA	X					X		X			X
ARAPAHOE	X									X	X
BACA	X		X	X							X
BENT	X		X	X							X
BOULDER	X	X	X				X		X		X
CHEYENNE	X	X	X	X						X	X
CONEJOS	X					X		X			X
COSTILLA	X							X			X
DELTA	X	X	X	APPLE			X	PEACH			
DOLORES		X									X
ELBERT	X					X				X	X
EL PASO		X									X
FREMONT											
GARFIELD											
KIOWA	X		X	X							X
KIT CARSON	X	X	X	X		X		POPCORN		X	X
LA PLATA	X	X	X								X
LARIMER	X	X	X						X		X
LAS ANIMAS	X			X							X
LINCOLN		X	X	X						X	X
LOGAN	X	X	X	X		X		MILLET	X	X	X
MESA	X	X	X	APPLE		X	X	PEACH			X
MOFFAT	X										X
MONTEZUMA	X	X									X
MONTROSE	X	X	X	APPLE		X	X	PEACH			
MORGAN	X	X	X	X		X	X	X	X	X	X
OTERO	X	X	X	X			X				X
PHILLIPS	X	X	X	X		X		POPCORN		X	X
PROWERS	X		X	X			X	POPCORN			X
PUEBLO	X	X	X	X			X				X
RIO BLANCO	X										X
RIO GRANDE	X					X		X			X
ROUTT	X					X					X
SAGUACHE	X	_				X		X	_		X
SEDGWICK	X	X	X	X		X					X
WASHINGTON	X	X	X	X		X	X	X	X	X	X
WELD	X	X	X		X	X	X	X	X	X	X
YUMA	X	X X	v	v	v		v	v	POPCORN	v	Y

Notes... Network (For More Information) Contact: Rod Sharp, Ag. & Business Management Economist, CSU Extension (970)-245-9149, Rod.Sharp@colostate.edu (Updated August 2008)