The Enterprise Risk Analyzer

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What is RISK?

- RISK: The uncertainty or potential variation in the outcome of future events that can negatively impact your:
  - *Current profit level*
  - *Financial situation (equity position)*
  - *Satisfaction and well-being*

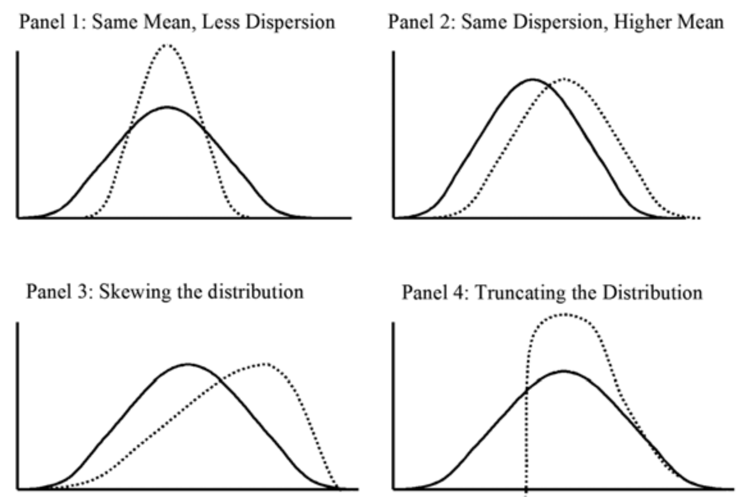
Sources of Risk in Agriculture – *Ag Risk 5*

1. Marketing and Price Risk
2. Production Risk
3. Institutional Risk
4. Human Risk
5. Financial Risk

Strategies for Managing Risk

1. Avoid it
2. Reduce it
   a) *Reduce the probability it will happen*
   b) *Reduce the impact if it does happen*
3. Transfer it outside the business
   a) *Insurance*
   b) *Contracting*
4. Build your internal capacity to bear
   a) *Increase reserves*
   b) *Maintain flexibility*
5. Accept it

Strategy Impacts



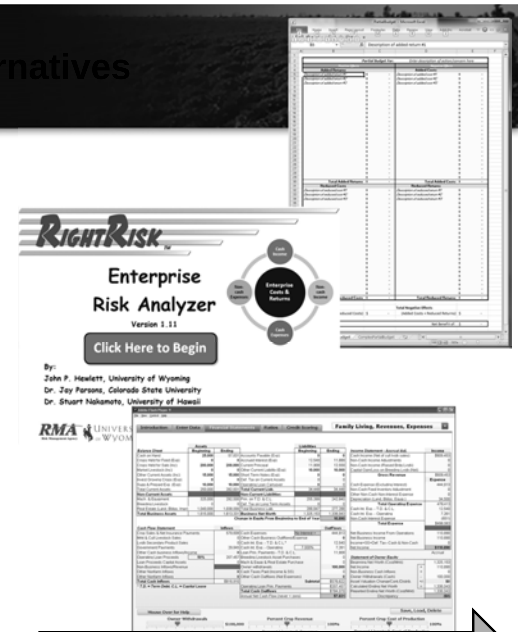
Risk Tradeoffs

Profits are the returns for taking risks

- Upside: Greater risk taking usually leads to greater wealth over time
- Downside: Losses from risk taking can potentially be devastating
- Managing risks are a matter of evaluating tradeoffs.
- How much risk and how much stress are you willing to endure to potentially achieve higher returns?

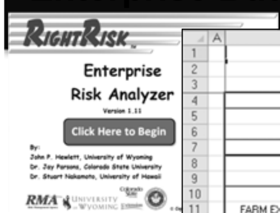
Tools to Evaluate Alternatives

- Partial Budget
  relatively minor changes
- Enterprise Budget
  larger changes
- Whole Farm Budget
  substantial changes



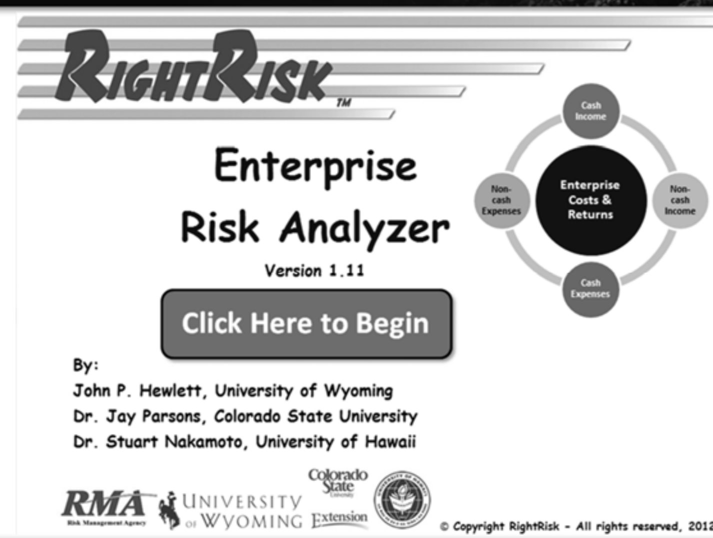
http://RightRisk.org > Tools

Enterprise Budget Analysis



		Cow-Calf	Native Hay	Oat Hay	Alfalfa Establishment	Alfalfa - Baled
4	FARM REVENUE					
5	TOTAL FARM INCOME - CASH	121,759.00	12,380.00	2,802.00	2,306.00	25,040.00
6	TOTAL NON-CASH INCOME ADJUSTMENTS					
7	**GROSS FARM REVENUE**	121,759.00	12,380.00	2,802.00	2,306.00	25,040.00
9	FARM EXPENSES					
10	FARM EXPENSES - CASH	86,843.00	6,557.00	1,756.00	2,297.00	12,072.00
11	FARM EXPENSES - NON-CASH EXPENSE ADJUSTMENTS	98,550.00	11,245.00	2,709.00	2,536.00	15,331.00
12	**GROSS FARM EXPENSES**	185,393.00	17,802.00	4,465.00	4,833.00	27,403.00
14	**NET FARM INCOME FROM OPERATIONS**	**(63,634.00)**	**(5,422.00)**	**(1,663.00)**	**(2,527.00)**	**(2,363.00)**
16	Break-Even PRICE Analysis					
18	YIELD PER ENTERPRISE UNIT	Cow-Calf	Native Hay	Oat Hay	Alfalfa Establishment	Alfalfa - Baled
19	*Maximum*	400	1.75	4	4	4
20	***Most Likely***	**373.97**	**1.5**	**3**	**2.54**	**3**
21	*Minimum*	350	1	1.5	1.5	1.5
23	BREAK-EVEN PRICE - CASH EXPENSES					
24	*Minimum*	0.59	32.30	33.77	44.17	29.02
25	***Most Likely***	**0.64**	**37.68**	**45.03**	**69.56**	**38.69**
26	*Maximum*	0.68	56.53	90.05	117.79	77.38
28	BREAK-EVEN PRICE - GROSS EXPENSES					
29	*Minimum*	1.27	87.69	85.87	92.94	65.87
30	***Most Likely***	**1.36**	**102.31**	**114.49**	**146.37**	**87.83**
31	*Maximum*	1.45	153.47	228.97	247.85	175.66
33	Probability Analysis (*click button at right*)	Graph	Graph	Graph	Graph	Graph

Enterprise Risk Analyzer



Current Federal Insurance Options

2012 California Crop Insurance Profile

Insurance Plans Available in California			
Insurable Crops	Insured Acres	Total Acres	Percent Insured
Alfalfa Seed	8,663	39,710	22%
Almonds	661,184	780,000	84%
Apples	6,074	17,500	35%
Avocados	36,082	51,794	69%
Barley	86,423	120,000	54%
Blueberries	1,914	3,900	49%
Cherries	24,591	29,000	85%
Citrus – 8 types of fruit	224,782	269,400	83%
Corn	238,151	610,000	39%
Cotton & ELS Cotton	324,463	367,000	88%
Beans (Dry)	22,704	58,500	39%
Figs	4,593	8,045	57%
Forage Production	133,074	950,000	14%
Grapes (Table)	79,908	85,000	94%
Grapes (Wine)	480,299	506,000	94%
Grain Sorghum	1,034	17,000	6%
Mint	2,214	3,700	60%
Oats	12,598	25,000	50%
Olives	21,630	44,000	49%
Onions	3,404	43,300	8%
Pears	8,295	14,000	59%
Pecans	307	3,600	9%
Pistachios	83,239	153,000	54%
Potatoes	20,458	29,000	71%
Prunes	50,799	58,000	88%
Rice*	458,425	575,000	84%
Rice (Cultivated Wild)	13,879	15,000	93%
Safflower*	35,205	53,000	66%
Stonefruit (Includes Plums)	88,718	115,000	77%
Strawberrie	421	38,000	1%
Sugar Beets	3,852	24,500	27%
Tomatoes (Fresh)	14,416	30,000	48%
Tomatoes (Processing)	240,958	260,000	93%
Walnuts	136,397	227,000	60%
Wheat*	382,264	750,000	51%

Dollar Liability Program	Total Dollar Liability
Adjusted Gross Revenue	$50,675,841
Apiculture (Rainfall Index)	$2,840,436
Forage Seeding	$3,317,586
Livestock Gross Margin (LGM) Dairy	$111,499,097
Livestock Risk Protection (LRP) Lamb	$13,964,099
Nursery	$228,227,112
Pasture, Rangeland, Forage (Rainfall Index)	$9,159,898
Raisins	$173,169,530

Crop Pilot Programs

Program	County Availability
Adjusted Gross Revenue	Fresno, Kern, Riverside, San Diego, San Joaquin, San Luis Obispo, Tulare and Ventura Counties
Apiculture (Rainfall Index)	All Counties
Avocados	Orange, Riverside, San Diego, San Luis Obispo, Santa Barbara and Ventura Counties
Cherries	Contra Costa, Fresno, Kern, Sacramento, San Benito, Santa Clara, San Joaquin, Stanislaus and Tulare Counties
Forage (Alfalfa) Seed	Kings and Fresno Counties
Strawberries	Fresno, Merced, Monterey, Santa Barbara, Santa Cruz
Citrus Dollar (Navels)	Fresno, Kern, Madera and Tulare Counties
PRF (Rainfall Index)	All Counties
Olives	Butte, Colusa, Fresno, Glenn, Tehama, Kern, Madera, San Joaquin, Sutter, Tulare, Yolo
Pistachios	Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Kings, Madera, Merced, Riverside, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Stanislaus, Sutter, Tehama, Tulare, Yolo, Yuba

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Data as of January 2013

http://www.rma.usda.gov/pubs/2013/stateprofiles/california12.pdf

California
Fifteen Year Crop Insurance History

Year	Policies Earning Premium	Net Acres Insured	Liability	Gross Premium	Losses	Loss Ratio
1998	24,069	3,526,388	2,124,396,498	109,881,663	118,272,047	1.08
1999	28,590	4,023,277	2,494,656,258	130,826,215	133,134,448	1.02
2000	29,191	4,278,811	2,796,253,781	143,343,081	92,359,660	0.64
2001	27,958	4,010,128	2,690,254,801	142,519,840	117,359,756	0.82
2002	27,200	3,920,007	2,833,618,262	146,366,279	79,069,948	0.54
2003	26,471	3,990,438	2,951,841,797	150,191,677	79,366,135	0.53
2004	25,629	3,908,123	3,153,568,412	157,913,694	83,152,323	0.53
2005	24,859	3,818,813	3,317,832,621	168,995,411	92,497,107	0.55
2006	24,490	3,732,668	3,658,667,941	186,617,268	88,506,353	0.47
2007	24,207	3,780,829	3,708,288,115	187,465,253	154,139,100	0.82
2008	24,074	3,810,375	3,911,645,612	197,920,945	89,455,031	0.45
2009	24,723	3,932,306	4,648,316,411	243,273,227	177,694,925	0.73
2010	24,649	3,752,230	4,493,432,544	219,282,609	111,142,020	0.51
2011	24,726	4,062,207	4,792,588,280	248,898,972	110,209,054	0.44
2012	25,441	4,583,226	5,358,332,573	259,128,046	91,451,022	0.35

* 2012 numbers are incomplete

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http://www.rma.usda.gov

Adjusted Gross Revenue (AGR)

- Adjusted Gross Revenue (AGR) crop insurance provides producers with protection against low revenue from natural causes and market fluctuations.
  - *Uses your historical IRS tax form (Schedule F or equivalent forms) information and an annual farm report as a base;*
    - When completing an AGR application, you must submit a history calculation worksheet, including 5 years of allowable income and expense data from IRS tax returns (Schedule F or equivalent forms) plus an annual farm report for the insurance year listing expectations.
  - *Provides insurance for multiple agricultural commodities in one product;*
  - *Establishes revenue as a common denominator for the production of all agricultural commodities.*

Adjusted Gross Revenue (AGR)

- Insurance is provided against revenue loss due to any unavoidable natural occurrences during the current or previous insurance year or due to market fluctuations that cause a revenue loss during the current insurance year.
- You must buy or cancel your policy on or before January 31.
- All existing policies roll over each year if they are not canceled or changed. The insurance attaches each year on January 1. For new policies, insurance coverage will begin 10 days after a properly completed application is received.
- You must make any and all changes to your insurance contract on or before August 31.
- Claims are settled after taxes are filed for the insurance year.

RMA AGR Fact Sheet

USDA United States Department of Agriculture

RMA Program Aid Number 1906

A Risk Management Agency Fact Sheet

Adjusted Gross Revenue (AGR)

November 2010

Adjusted Gross Revenue (AGR) crop insurance provides producers with protection against low revenue from natural causes and market fluctuations. The insurance covers income from agricultural commodities, as well as income from animals, animal products, and aquaculture species reared in a controlled environment.

Adjusted Gross Revenue:
- Uses your historical Internal Revenue Service (IRS) tax form (Schedule F or equivalent forms) information and an annual farm report as a base;
- Provides insurance for multiple agricultural commodities in one product;
- Establishes revenue as a common denominator for the production of all agricultural commodities.

AGR Timeline

Sales Closing Date: You must buy or cancel your policy on or before January 31.
Beginning of Insurance: All existing policies roll over each year if they are not canceled or changed. The insurance attaches each year on January 1. For new policies, insurance coverage will begin 10 days after a properly completed application is received.
Contract Change Date: You must make any and all changes to your insurance contract on or before August 31.
Insurance Year: Defined as a calendar year in which the sales closing date occurs and includes both calendar-year and fiscal-year filings (corresponding to the policyholder's IRS tax period).
Claims: Claims are settled after taxes are filed for the insurance year.

Availability

AGR insurance is available in: California (selected counties), Connecticut, Delaware, Florida (selected counties), Idaho (selected counties), Maine, Maryland (selected counties), Massachusetts, Michigan (selected counties), New Hampshire, New Jersey, New York (selected counties), Oregon (selected counties), Pennsylvania (selected counties), Rhode Island, Vermont, Virginia (selected counties), and Washington (selected counties).

Eligibility

To meet the eligibility criteria for AGR coverage, you must:
- Be a U.S. citizen or resident;
- File a calendar-year or fiscal-year farm tax return;
- Produce agricultural commodities primarily in pilot counties (may include income from contiguous non-pilot counties);
- Have liability not exceeding $6.5 million;
- Have had same tax entity for 7 years (filed 5 consecutive years of Schedule F tax forms, plus previous year and insurance year) unless a change in tax entity is reviewed and approved by your insurance provider;
- Purchase traditional Federal crop insurance, if available, when more than 50 percent of your expected income is from insurable commodities (when you purchase both AGR and other crop insurance plans, the AGR premium will be reduced); and
- Earn no more than 35 percent of expected allowable income from animals and animal products.

Insured Causes of Loss

Insurance is provided against: revenue loss due to any unavoidable natural occurrences during the current or previous insurance year or due to market fluctuations that cause a revenue loss during the current insurance year. No payment will be made for losses due to negligence, mismanagement, or wrongdoing by the policyholder, the policyholder's family, household members, tenants, employees, or contractors; crop abandonment; bypassing of acreage; or other causes listed in the insurance policy.

AGR Application Information

When completing an AGR application, you must submit:
- A history calculation worksheet, including 5 years of allowable income and expense data from IRS tax returns (Schedule F or equivalent forms);
- An annual farm report for the insurance year listing each commodity to be produced, the expected quantity of the commodity to be produced, and the expected price for the commodity;
- Beginning inventories, if applicable; and
- An indication of changes that will result in lower income for the insurance year than the historical average.

This fact sheet gives only a general overview of the crop insurance program and is not a complete policy. For further information and an evaluation of your risk management needs, contact a crop insurance agent.

California County Availability

Fresno, Kern, Riverside, San Diego, San Joaquin, San Luis Obispo, Tulare and Ventura

Thank You!

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