

Using the Enterprise Risk Analyzer to Assess the Feasibility of Pitahaya as a Viable Crop Alternative



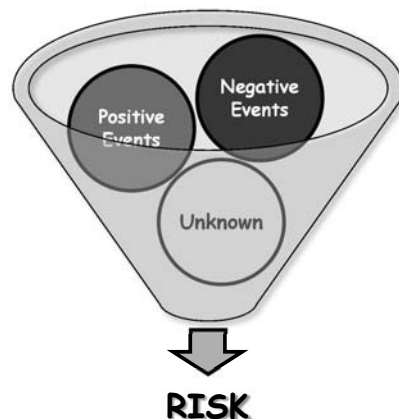
John P. Hewlett, University of Wyoming

Dr. Jay Parsons, University of Nebraska-Lincoln

<http://california.erighrisk.com>

What is RISK?

- **Certainty**- lack of doubt
- **Uncertainty**- doubt about future events
- **RISK**- potential variation in the outcome of future events



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*

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

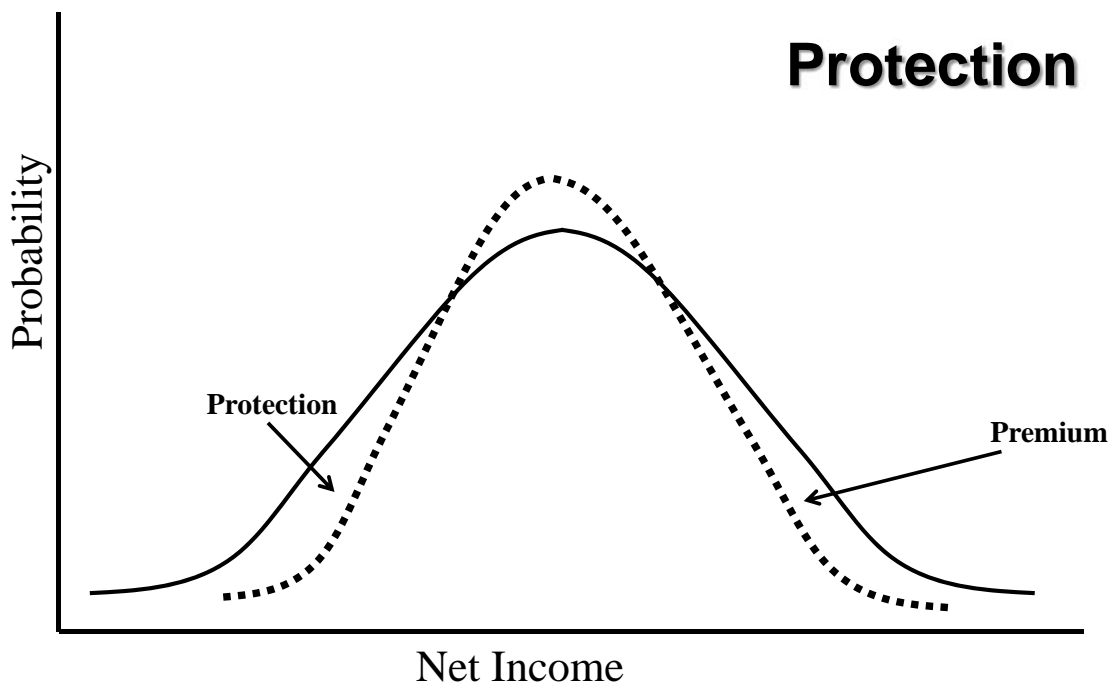


Strategies for Managing Risk

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. **Increase capacity to bare**
 - a) *Increase reserves*
 - b) *Maintain flexibility*
5. **Accept it**



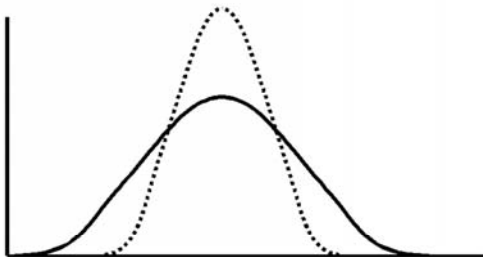
How much risk is right for you?



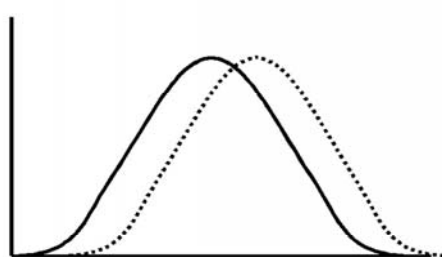
Strategy Impacts



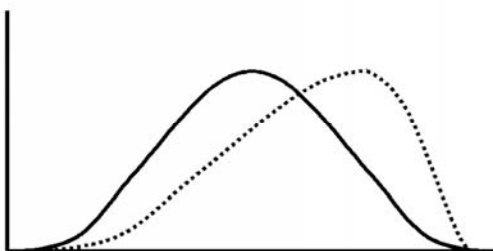
Panel 1: Same Mean, Less Dispersion



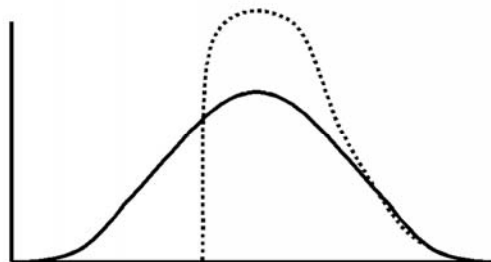
Panel 2: Same Dispersion, Higher Mean



Panel 3: Skewing the distribution



Panel 4: Truncating the Distribution



Risk Tradeoffs

Profits are 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** (uncertainty) are you willing to accept for **possible higher returns?**



<http://california.erightrisk.com>

Current Federal Insurance Options

Insurance Plans Available in CALIFORNIA			
Insurable Crops	Insured Acres	Total Acres	Percent Insured
Alfalfa Seed	11,795	38,200	33%
Almonds	721,275	860,000	84%
Apples	5,262	15,200	37%
Avocados	39,130	55,251	69%
Barley	38,635	95,000	41%
Blueberries	3,771	4,547	83%
Cherries	20,063	49,414	72%
Citrus - 8 types of fruit	239,451	270,000	89%
Corn	184,830	430,000	43%
Cotton & ELS Cotton	309,372	315,000	98%
Beans (Dry)	25,572	47,500	54%
Figs	4,076	7,351	55%
Forage Production	144,193	930,000	16%
Grapes (Table)	81,427	95,000	86%
Grapes (Wine)	488,428	570,000	86%
Grain Sorghum	3,328	4,570	73%
Mint	1,641	2,000	82%
Oranges	3,624	10,000	36%
Olives	26,557	42,779	62%
Onions	19,570	43,900	45%
Pears	8,455	11,800	72%
Peaches	1,370	3,600	38%
Pistachios	90,097	203,000	44%
Potatoes	23,680	33,500	71%
Prunes	45,972	50,000	92%
Rice	478,856	496,000	97%
Rice (Cultivated Wild)	12,444	13,000	96%
Safflower	35,268	55,000	64%
Shallot/Onion (Includes Plums)	70,125	102,073	69%
Strawberries	26	41,500	1%
Sugar Beets	4,454	24,500	18%
Tomatoes (Fresh)	11,313	28,000	40%
Tomatoes (Processing)	278,658	288,000	97%
Walnuts	148,497	290,000	51%
Wheat	271,829	585,000	46%
Dollar Liability Program		Total Dollar Liability	
Adjusted Gross Revenue		\$35,427,458	
Apiculture (Rainfall Index)		\$26,811,523	
Forage Seeding		\$2,288,715	
Livestock Gross Margin (LGM) Dairy		\$58,023,160	
Livestock Risk Protection (LRP) Feeder Cattle and Lamb		\$11,944,519	
Nursery		\$140,832,241	
Pasture, Rangeland, Forage (Rainfall Index)		\$41,605,195	
Rainfall		\$196,817,349	
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	Butte, Contra Costa, Fresno, Kern, Kings, Madera, Merced, Placer, Sacramento, San Benito, Santa Clara, San Joaquin, Stanislaus, Sutter, Tulare, and Yuba Counties		
Cherries	Butte, Contra Costa, Fresno, Kern, Kings, Madera, Merced, Placer, Sacramento, San Benito, Santa Clara, San Joaquin, Stanislaus, Sutter, Tulare, and Yuba Counties		
Forage (Alfalfa) Seed	Kings and Fresno Counties		
FRF (Rainfall Index)	Fresno, Merced, Monterey, Santa Barbara, Santa Cruz, and Ventura Counties		
Citrus (All other)	All Counties		
FRF (Rainfall Index)	Butte, Colusa, Fresno, Glenn, Tehama, Kern, Madera, San Joaquin, Shasta, Stanislaus, Sutter, Tulare, Yuba		
Olives	Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Kings, Madera, Merced, Riverside, San Benito, San Bernardino, San Joaquin, San Luis Obispo, Santa Barbara, Stanislaus, Sutter, Tehama, Tulare, Yuba Counties		
Pistachios	Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Kings, Madera, Merced, Riverside, San Benito, San Bernardino, San Joaquin, San Luis Obispo, Santa Barbara, Stanislaus, Sutter, Tehama, Tulare, Yuba Counties		

2014 California Crop Insurance Profile

Regional Office
 Contact: Jeff Yasu, Director
 Address: 430 G Street #4168
 Davis, CA 95616
 Phone: (530) 792-5570
 Fax: (530) 792-5865
 E-Mail: jeff.yasu@rma.usda.gov

Western Regional Compliance Office
 Contact: Susan Choy, Director
 Address: 430 G Street #4167
 Davis, CA 95616
 Phone: (530) 792-5550
 Fax: (530) 792-5865
 E-Mail: susan.choy@rma.usda.gov

Date as of January 2014

<http://www.rma.usda.gov/pubs/2015/stateprofiles/california14.pdf>

California Fifteen Year Crop Insurance History

Year	Policies Earning Premium	Net Acres Insured	Liability	Gross Premium	Losses	Loss Ratio
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	27,203	3,920,007	2,633,615,262	146,356,279	79,069,948	0.54
2003	29,471	3,990,438	2,951,041,797	150,191,677	79,368,135	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	3,658,867,941	186,617,268	88,506,353	0.47
2007	24,207	3,780,829	3,708,288,115	187,455,253	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	177,894,925	0.73
2010	24,649	3,752,230	4,493,432,544	219,282,609	111,142,020	0.51
2011	24,725	4,062,207	4,752,395,350	240,080,372	110,209,054	0.44
2012	25,462	4,600,044	5,394,444,735	260,903,031	112,207,209	0.43
2013	25,405	5,238,284	6,135,260,032	288,391,743	129,091,231	0.45
2014*	26,300	6,765,108	7,720,921,518	392,164,580	302,683,204	0.77

* 2014 numbers are incomplete






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Pecans	1,370	3,600	38%	
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Pasture, Rangeland, Forage (Rainfall Index)			\$41,605,195	
Raisins			\$196,617,340	



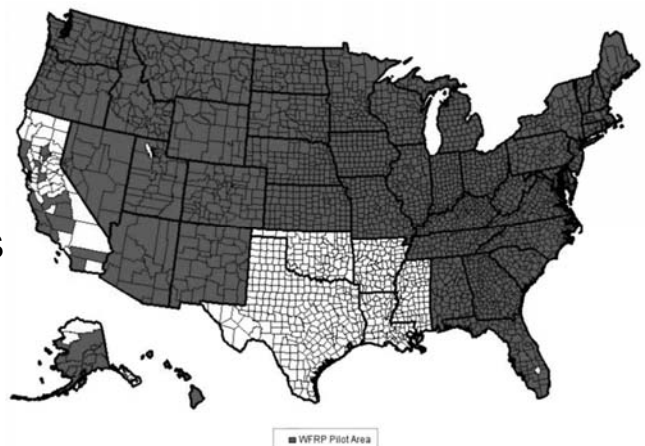
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Whole-Farm Revenue Protection

- A whole-farm insurance product that provides producers with risk management protection for all eligible commodities on the farm under **one insurance policy**

- WFRP is a combination of Adjusted Gross Revenue (AGR) and Adjusted Gross Revenue-Lite (AGR-Lite) policies



<http://www.rma.usda.gov>

Whole-Farm Revenue Protection cont.

- Coverage is based on:
 - The operation's whole-farm **historic average revenue and expenses** using information from five consecutive tax years before the insurance year (adjusted according to the WFRP policy and procedures)
- An indemnity payment occurs when:
 - *Allowable Revenue* during the insurance year **falls below** the *Insured Revenue* (the amount of revenue the farm operation is expected to earn during the insurance year multiplied by the coverage level elected)

Whole-Farm Revenue Protection cont.

COMPARISON	WFRP	AGR-Lite	AGR
Liability Limit	\$8.5 Million	\$1 Million	\$6.5 Million
Coverage Level	50-85 in 5% increments	65, 75, 80*	65, 75, 80*
	3 Commodities for 80 and 85%	*3 Commodities	*3 Commodities
One Commodity	Not eligible for WFRP if only one commodity and that commodity has an MPCl revenue product available.	No Restriction	No Restriction
Payment Rate	None	75, 90	75,90
Animal or Animal Product Limit	35% of expected revenue or up to \$1 million (Max)	None	35 % of Expected Income
Nursery and Greenhouse Limit	35% of expected revenue or up to \$1 million (Max)	None	None
Potato Requirement	Minimum of 2 Commodities (with calculation)	Minimum of 2 Commodities (with calculation)	Minimum of 2 Commodities (with calculation)
Replant Payments	Up to 20 percent of expected revenue for annual commodity with 20 acres or 20 percent of crop needing replant. Not allowed if also insured under MPCl with replant provisions.	None	None
Other Federal Crop Insurance	Optional - MPCl -buy up coverage level only for both WFRP and MPCl. No CAT level MPCl allowed.	Optional	MPCl required if 50% of expected income from MPCl crops
Market readiness amounts in insured revenue	Yes	No	No
Expanding operations	Average allowable historic revenue increased by 10% if you can prove expansion and approved by AIP, to allow for minor farm growth that might not trigger indexing.	No	No
Cancellation/Termination	Same as sales closing date for county. (2/28, 3/15)	31-Jan	31-Jan
Contract Change	31-Aug	31-Aug	31-Aug
Sales Closing Date	In Actuarial Documents-same as dates for spring crops for county: 2/28 and 3/15 depending on county	March 15 New Jan 31 Carryover	31-Jan
Rating Methodology	Same as AGR	Same as AGR	Rates revenue variability of individual commodities.

Whole-Farm Revenue Protection cont.



A Risk Management Agency Fact Sheet

Whole-Farm Revenue Protection for Federal Crop Insurance

November 2014

Whole-Farm Revenue Protection

Whole-Farm Revenue Protection (WFRP) provides a risk management safety net for all commodities on the farm under one insurance policy. This insurance plan is tailored for any farm with up to \$8.5 million in insured revenue, including farms with specialty or organic commodities (both crops and livestock), or those marketing to local, regional, farm-identity preserved, specialty, or direct markets.

Availability



Causes of Loss

WFRP provides protection against the loss of insured revenue due to an unavoidable natural cause of loss that occurs during the insurance period and will also provide carryover loss coverage if you are insured the following year. See the policy for a list of covered causes of loss.

Important Dates

Sales Closing, Cancellation, & Termination Dates	
County Specific	February 28 or March 15
Revised Farm Operation Report Dates	
Calendar Year Filers	July 15
Early Fiscal Year Filers	July 15
Late Fiscal Year Filers: Fiscal Year Begins	August or September
August or September	30 days after start of fiscal year
October, November, or December	October 31
Contract Change Date	August 31

Talk to your crop insurance agent about the dates that apply for your county.

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.

Insurance Year

The insurance year is a calendar year if taxes are filed by calendar year, or a fiscal year if taxes are filed on a fiscal year.

Reporting Requirements

Revenue Losses - You must submit a notice of loss within 72 hours after discovery that revenue for the insurance year could be below the insured revenue. Inspections may be required for losses. You must have filed farm taxes for the insurance year before any claim can be made. You must make claims no later than 60 days after the date you submit farm tax forms to the Internal Revenue Service (IRS). Claim payments for a revenue loss under WFRP are paid within 30 days after the determination of a payment due as long as you see in compliance with the policy.

Coverage

WFRP protects your farm against the loss of farm revenue that you expect to earn or will get from:

- Commodities you produce during the insurance period, whether they are sold or not.
- Commodities you buy for resale during the insurance period, and
- All commodities on the farm except timber, forest, and forest products, and animals for sport, show, or pets.

The policy also provides replant coverage:

- For annual crops, except those covered by another policy,
- Equal to the cost of replanting up to a maximum of 20 percent of the expected revenue, and
- When 20 percent or 20 acres of the crop needs to be replanted.

The approved revenue amount is determined on your Farm Operation Report and is the lower of the expected revenue or your whole-farm historic average revenue. Coverage levels range from 50 percent to 85 percent. Catastrophic Risk Protection (CAT) coverage is not available. The number of commodities produced on the farm are counted using a calculation that determines:

- If the farm has the diversification needed to qualify for the 80 and 85 percent coverage levels (there is a 3 commodity requirement).

carrots. The minimum proportion to be considered a countable commodity is one-third of that amount. Therefore, in this example, for corn, soybeans, spinach, or carrots in each county, each commodity would have to make up at least 8.3 percent of the total revenue of the farm to count as a commodity under WFRP. Commodities with revenue below the minimum will be grouped together in order to recognize farm diversification (this will make the commodity count higher). The Maximum Farm Approved Revenue represents the maximum approved revenue for a farm to be eligible for WFRP given the \$8.5 million maximum liability allowed.

Eligibility

Eligibility for WFRP coverage requires you to:

- Be eligible to receive Federal benefits,
- Be a U.S. citizen or resident,
- File either a Schedule F tax form or other farm tax form that can be converted to a Substitute Schedule F,
- Have 5 consecutive years of farm tax history (for the 2015 WFRP insurance year, farm tax records from 2009-2013 must be available),
- Produce at least 50 percent of your agricultural commodities in counties where WFRP is available and the balance in neighboring counties,
- Have no more than \$8.5 million in insured revenue, which is the farm revenue allowed to be insured under the policy multiplied by the coverage level you select (see table above),
- Have no more than 50 percent of total revenue from commodities purchased for resale,
- Have "top-up" coverage levels on any Federal crop insurance plans you choose with the WFRP insurance plan.
- Meet the diversification requirements of the policy by having two or more commodities if a commodity you are raising has revenue protection or actual revenue history insurance available, and
- Meet the diversification requirements of the policy by having two or more commodities if there are potatoes on the farm.

Information You Provide

There are certain documents you must provide to your crop insurance agent to get Whole-Farm Revenue Protection insurance. For the Whole-Farm History Report you must provide:

- 5 consecutive years of Schedule F or other farm tax forms (it must be possible to complete a Substitute Schedule F form if you filed farm tax forms other than Schedule F). For the 2015 insurance year, tax

from uninsured causes of loss. The insured revenue amount will be reduced by the "approved" amount for each percentage point the actual approved revenue is below 70 percent of the approved expenses.

Farm Subsidy

Farms with two or more commodities will receive a whole farm revenue subsidy as long as the minimum diversification requirements are met. Farms with one commodity will receive the basic level of premium

Whole-Farm Revenue Protection

purchase Whole-Farm Revenue Protection from a crop insurance agent by the sales closing date shown for your county in the actuarial documents at: www.fsa.usda.gov

US

1800
Independence Ave., SW
Washington, DC 20250
202-690-2803
690-2818
www.fsa.usda.gov
www.ccrp.usda.gov

and Copies from the Web

Printable publications/fact sheets page www.usda.gov/oc/whofarmrevenue

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You are here: [FSA Home](#) / [Disaster Assistance Programs](#) / [Noninsured Crop Disaster Assistance Program \(NAP\)](#)

Disaster Assistance Programs

Noninsured Crop Disaster Assistance Program

Provides financial assistance to producers of noninsurable crops when low yields, loss of inventory or prevented planting occurs due to natural disasters.

Noninsured Crop Disaster Assistance Program (NAP) Related Information -

- [Access the Online NAP Tool by clicking this link](#)
- [2015 and subsequent crop year basic provisions display.](#) (.PDF, 229 KB)
- [View NAP Program Fact Sheet](#)
- [Noninsured Crop Disaster Assistance Program: Interim Rule](#) (PDF, 416 KB, Dec 15, 2014)

Related Topics

- [Emergency Assistance for Livestock, Honey Bees, and Farm-raised Fish \(ELAP\)](#)
- [Emergency Forest Restoration Program \(EFRP\)](#)
- [Livestock Forage Program \(LFP\)](#)
- [Livestock Indemnity Program \(LIP\)](#)
- [Noninsured Crop Disaster Assistance Program \(NAP\)](#)
- [Tree Assistance Program \(TAP\)](#)

I Want To...

- [View CCC-471 NAP Basic Provisions \(229 KB\)](#)

www.fsa.usda.gov/nap



Noninsured Crop Disaster Assistance Program (NAP): ELIGIBLE crops

- ELIGIBLE CROPS:
 - Any commercial agricultural crop (excluding livestock and their by-products), commodity, or acreage of a commodity **grown for food or fiber**, and commercial or industrial crops for which CAT or additional coverage is not available
 - **Biomass crops** or feedstock crop grown for purpose of producing bio-based product
- CROPS **NOT** ELIGIBLE:
 - Where CAT or additional level of insurance coverage **IS** available
 - Where Group Risk Protection insurance **IS** available



Noninsured Crop Disaster Assistance Program (NAP): Coverage Summary

- NAP available for 2015 through 2018 crop years:
 - CAT-level coverage 50/55, and
 - Buy-up coverage
 - 50, 55, 60 or 65 percent coverage at 100 percent of the established market price
- Protects against eligible causes of loss during the coverage period before or during harvest: drought, hail, excessive moisture, freeze, tornado, hurricane, excessive wind, insufficient chill hours (limited), earthquake, flood, volcanic eruption
- Market price established by FSA as an **average market price** for the eligible crop

Noninsured Crop Disaster Assistance Program (NAP): Coverage Updates

- Organic Crop Option
 - May receive payment based on an organic price if
 - RMA has established a separate organic price in the State
 - Producers elect the organic option on CCC-471
 - Acreage is certified organic or exempt from certification according to the National Organic Program regulations
 - A copy of organic system plan provided to FSA
- Direct Market Price Option
 - May receive payment based on an direct market price if
 - Buy-up coverage is elected with direct market price option
 - Sufficient data is available for FSA to approve separate average market prices within a State

Noninsured Crop Disaster Assistance Program (NAP): BUY-UP Coverage cont.

- **Premium calculation:**
 - Eligible acres
 - X Producer share
 - X Approved yield
 - X Coverage level
 - X 100% of market price
 - X 5.25 percent
 - **Payment calculation:**
 - Eligible acres
 - X Producer share
 - X Approved yield
 - X Coverage level (50/55/60/65%)

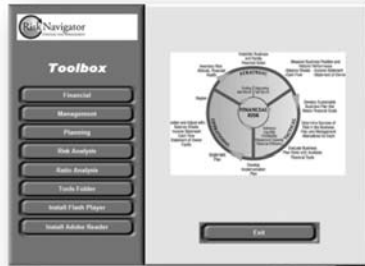
 - = Disaster level
 - less Production to count

 - = Net production for payment

 - X Applicable market price
 - X Price coverage (100% or 55%)
 - X Harvest factor (100% or 60%)
 - less Salvage value

 - = calculated NAP payment
- ❖ NAP fees or buy-up premiums are reduced by 50 percent for:
- Beginning farmers (BF)
 - Limited resource farmers (LR)
 - Socially disadvantaged farmers (SDA)

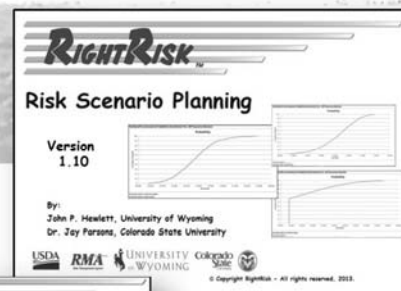
Evaluating Alternatives



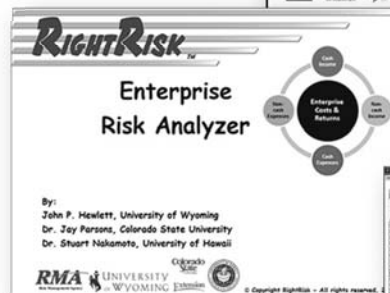
RightRisk Analytics



- Risk Scenario Planner
- relatively minor changes



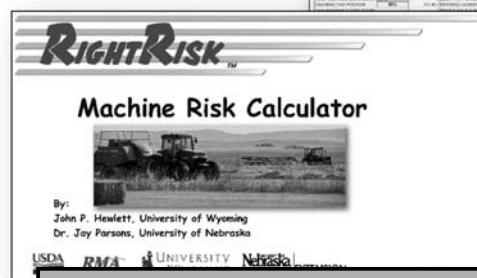
- Enterprise Risk Analyzer
- larger changes



- R/D Financial
- whole farm budget, substantial changes

Account	Balance	Debit	Credit	Balance	Debit	Credit
Beginning Balance	100.00			100.00		
Operating Expenses		20.00		80.00		
Income			20.00	100.00		
Ending Balance				100.00		

- Machine Risk Calculator
- estimating machinery and field operation costs



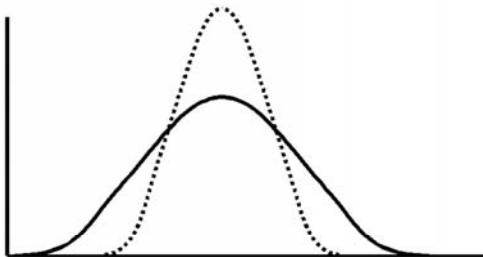
Enterprise Risk Analyzer



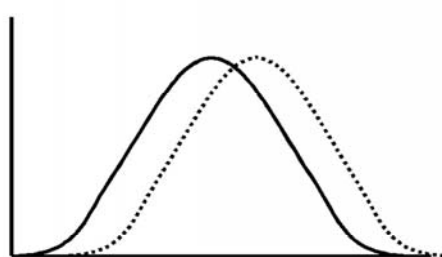
	A	B	C	D	E	F
1						
2						
3			Cow-Calf	Native Hay	Oat Hay	Alfalfa Establishment
4		FARM REVENUE				
5		TOTAL FARM INCOME - CASH	121,759.00	12,380.00	2,802.00	2,306.00
6		TOTAL NON-CASH INCOME ADJUSTMENTS				
7		GROSS FARM REVENUE	121,759.00	12,380.00	2,802.00	2,306.00
8						25,040.00
9		FARM EXPENSES				
10		FARM EXPENSES - CASH	86,843.00	6,557.00	1,756.00	2,297.00
11		FARM EXPENSES - NON-CASH EXPENSE ADJUSTMENTS	98,550.00	11,245.00	2,709.00	2,536.00
12		GROSS FARM EXPENSES	185,393.00	17,802.00	4,465.00	4,833.00
13						
14		NET FARM INCOME FROM OPERATIONS	(63,634.00)	(5,422.00)	(1,663.00)	(2,527.00)
15						
16		Break-Even PRICE Analysis				
17						
18		YIELD PER ENTERPRISE UNIT	Cow-Calf	Native Hay	Oat Hay	Alfalfa Establishment
19		<i>Maximum</i>	400	1.75	4	4
20		Most Likely	373.97	1.5	3	2.54
21		<i>Minimum</i>	350	1	1.5	1.5
22						
23		BREAK-EVEN PRICE - CASH EXPENSES				
24		<i>Minimum</i>	0.59	32.30	33.77	44.17
25		Most Likely	0.64	37.68	45.03	69.56
26		<i>Maximum</i>	0.68	56.53	90.05	117.79
27						
28		BREAK-EVEN PRICE - GROSS EXPENSES				
29		<i>Minimum</i>	1.27	87.69	85.87	92.94
30		Most Likely	1.36	102.31	114.49	146.37
31		<i>Maximum</i>	1.45	153.47	228.97	247.85
32						
33		Probability Analysis (click button at right)	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>	<input type="button" value="Graph"/>
34						

Strategy Impacts

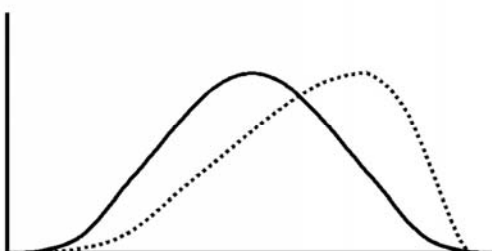
Panel 1: Same Mean, Less Dispersion



Panel 2: Same Dispersion, Higher Mean



Panel 3: Skewing the distribution



Panel 4: Truncating the Distribution



RightRisk

<http://RightRisk.org> > Courses

Risk Management Profiles



RISK MANAGEMENT PROFILES

Benchmarking in Agriculture

Paul was home from college on break and was talking to his parents about a class he had just completed. He told his parents that he learned about a powerful management tool called benchmarking that is becoming popular for agricultural producers to use.

He pointed out how benchmarks allow producers to measure both their financial and production performance compared to previous years and/or other producers and agricultural businesses.

Jack, Paul's dad, said that he had just read about benchmarks in a recent farm magazine. The magazine article compared benchmarks in agriculture to going to a doctor's office for a check-up. When you go to the doctor, they gather information, such as your blood pressure, your pulse, your temperature, and other information that they deem necessary for determining your medical health. Each measurement has some general guideline of what the measure should be.

For example, the temperature for a healthy adult should be between 97.8 and 99.1 degrees F. Anything outside this range might indicate a potential health problem. Being outside the range does not specify what the problem is, but it gives the doctor and patient an indicator that some action may be necessary.

Jack said the magazine article identified several financial benchmarks or industry guidelines that have been established for agricultural businesses to use to help them identify strengths and weaknesses in their business.

Paul told his dad that that is exactly what they talked about in his class as well. In class they used athletes instead of doctors as the comparison.

The final steps are to plan and introduce changes based on what is learned.

Liquidity Benchmark

The Current Ratio:
Measures cash flow and ability to pay bills on time

Current Ratio = Current Farm Assets divided by Current Farm Liabilities

Source of Information:
Balance Sheet

Benchmark:
Greater than 1.5

Solvency Benchmark

Debt to Asset Ratio
Measures long-term ability to repay all financial obligations

Debt to Asset Ratio = Total Farm Liabilities divided by Total Farm Assets

Source of Information:
Balance Sheet

Benchmark:
Less than 0.30 or Less than 30 percent

Profitability Benchmark

Rate of Return on Assets:
Measures...

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RIGHTRISK

RIGHTRISK NEWS

Noninsured Crop Disaster Assistance Program

Farmers may use insurance as a strategy to help manage the risks associated with growing crops. The Noninsured Crop Disaster Assistance Program (NAP), administered by USDA's Farm Service Agency (FSA), provides producers of noninsurable crops with at least some basic or catastrophic coverage when low yields, loss of inventory, or prevented planting occurs due to natural disasters. The catastrophic coverage level is 50 percent of the approved yield for all applicable acres with losses below that covered at 55 percent of the approved market price.



Eligible producers are those landowners, tenants, or sharecroppers who share in the risk of producing an eligible crop and have annual gross revenue not exceeding \$2,000,000. Eligible crops include those for which the catastrophic risk protection level of crop insurance is not available and must be crops grown for food, crops planted and grown for livestock consumption; crops grown for fiber (except for trees); crops grown under a controlled environment, specialty crops; value loss crops (such as aquaculture, Christmas trees, ginseng, ornamental nursery and turfgrass sod); sea oats and sea grass; and seed crops where the propagation stock is produced for sale as seed stock for other eligible NAP production.

When purchasing NAP, producers pay a service fee which is the lesser of \$250 per crop or \$750 per producer per administrative county, not to exceed a total of \$1,875 per producer with farming interests in multiple counties. The 2014 Farm Bill authorized the FSA to offer producers an opportunity to purchase higher levels of coverage on all eligible crops except those crops and grasses intended for grazing. NAP "buy-up coverage" allows a producer to select higher levels of yield protection (50, 55, 60, or 65 percent) at 100 percent of the established price.

Limited resource producers, beginning farmers, and socially disadvantaged farmers may request a waiver of service fees and reduction of "buy-up" premiums.

Buy-Up Example

Assume a farmer grows 100 acres of forage sorghum with an approved yield of 2 tons per acre on land he owns. Forage sorghum is eligible for NAP coverage in the county he resides and he chooses 60 percent yield/100 percent price "buy-up" coverage. The established price is \$137.33 per ton.

The farmer would pay a \$250 administrative fee plus the buy-up premium. The premium is calculated by multiplying the yield times coverage level times the price times the number of acres owned. Thus, the premium for buy-up coverage would be \$250 + \$865 (2T x 60 percent x \$137.33 x 100A x 100 percent x 5.25 percent) or \$1,115.

If due to an qualifying event, the farmer harvests one ton per acre, the NAP payment would be calculated by first multiplying the approved yield by the selected yield coverage, the number of acres, and the producer share to arrive at the disaster coverage level. Any actual production



How Much Risk is Right for You?

- DATES TO REMEMBER**
- Base Acre/Yield Updates - April 7, 2015
 - ARC/PLC Election - April 7, 2015
 - ARC/PLC Enrollment - Mid-April 2015 through Summer 2015
 - Production history reporting deadline - April 29, 2015
 - Spring crop acreage reporting deadline - July 15, 2015
- For more information see: <http://www.rms.usda.gov>

could be subtracted from the disaster coverage level to establish the net production for payment. The net production for payment then be multiplied by the price coverage level to get the calculated NAP payment.

Example: 2 tons x 60 percent x 100 acres x 100 percent = 120 tons yield coverage. Production to count: 1 ton x 100 acres = 100 tons. Net production for payment: 120 - 100 tons = 20 tons. The NAP payment would be 20 tons x \$137.33 = \$2,747.

If the producer purchased NAP insurance without buy-up coverage, he would have paid only the \$250 administrative fee. Since the coverage level is 50 percent and the farmer's 1 ton per acre actual yield would equal this disaster coverage level, there would be no loss and no payment.

NAP insurance is just one tool available to farmers for managing their production and price risks when crop insurance products are not available. Producers interested in possibly using NAP or NAP Buy-Up should contact their local FSA office or visit www.fsa.usda.gov.

Deadline is Looming!

April 15th is the annual deadline by which most people must file their tax returns and pay any taxes owed for the past tax year. It is also the deadline for making the first installment payment for any estimated taxes due for the current year.

Estimated tax payments should be the lesser of: (1) 90 percent of the tax expected for the current year or (2) 100 percent of the tax owed for the prior year with a tax liability of \$1,000 or more should file quarterly estimated payments to avoid possible penalties and interest charges. For calendar year taxpayers, estimated payments are due quarterly on April 15th, June 15th, September 15th, and January 15th.

Producers may choose to make a single estimated tax payment by the 15th of the month following the close of their tax year or by the 15th of the month following the close of their tax year - January 15th and respectively, for calendar year taxpayers.

Publication 225 (Farmer's Tax Guide) explains how the federal tax laws apply to farming. This publication and other information on tax returns and making estimated payments is available at www.irs.gov. The Rural Tax Education web site (www.ruraltax.org) is a valuable resource for articles on tax topics, sample tax returns, and other general tax information.

Producers should consult with their tax advisor about the proper filing of their taxes and whether they may be required to make quarterly payments of their taxes for the current year.



RIGHTRISK

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RightRisk helps decision-makers discover innovative and effective risk management solutions.

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Thank you!

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