



Energy In Agriculture: Managing the Risk

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**USDA's Office of Energy
Policy and New Uses**



**Risk Management
Agency**

Marketing & Risk Management Strategies

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Providing Inspiration for Scholastic Success



“Every morning in Africa, a gazelle wakes up. It knows that it must run faster than the fastest lion or it will be killed. Every morning a lion wakes up. It knows that it must outrun the slowest gazelle or it will starve to death. It doesn't matter whether you are a lion or a gazelle: when the sun comes up you had better be running.”

– Unknown





Objectives

Establish a framework for

- ✓ **managing risk,**
 - ✓ **developing risk management strategies,**
 - ✓ **having the confidence to make risky decisions, and**
 - ✓ **adapting a holistic approach to risk management decisions.**
- 



Define marketing

- ✓ **What do you market?**
Land, Labor, Capital & Management
- ✓ **What do you sell? Merchandise?**
Corn, Soybeans, Wheat . . .

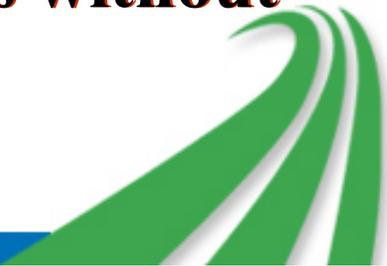




**Managing a farm (risk)
is like a general
leading an army
into many battles
to win a war**



“For the lone general who with subtlety must control a host of a million against an enemy as fierce as tigers, advantages and disadvantages are intermixed. In the face of countless changes he must be wise and flexible; he must bear in mind all possibilities. Unless he is stout of heart and his judgment not confused, how would he be able to respond to circumstances without coming to his wits' end? And how settle affairs without being bewildered? When unexpectedly confronted with grave difficulties, how could he not be alarmed? How could he control the myriad matters without being confused?” – Ho Yen-his²





You're the General!

Your army consists of:

- ✓ **Farm assets**
 - ✓ **Family**
 - ✓ **Employees**
 - ✓ **Supporting agencies**
 - ✓ **Advisors**
- 



Enemy

What ifs of decision making

- ✓ **Weather**
 - ✓ **Markets**
 - ✓ **Insects, disease, death loss**
 - ✓ **Genetic variability**
 - ✓ **Casualty losses**
 - ✓ **Input costs**
 - ✓ **Government policy**
- 



Enemy

What ifs of decision making

- ✓ **Who we buy from**
 - ✓ **Who we sell to**
 - ✓ **Competitors — Farmers**
- 



“The excellent general weighs the situation before he moves. He does not blunder aimlessly into baited traps. He is prudent, but not hesitant. He realizes that there are some roads not to be followed, some armies not to be attacked; ... He takes calculated risks but never needless ones... When he sees opportunity he acts swiftly and decisively.”

– Sun Tzu²





Weigh the situation

- ✓ **Within the farm – army’s condition**
 - ✓ **Strengths and weaknesses**
 - ✓ **Personal capabilities**

 - ✓ **Outside the farm – enemy’s condition**
 - ✓ **Opportunities and threats**

 - ✓ **Exploit Opportunities**
 - ✓ **Evaluate threats**
- 



Decisive factors

- ✓ **Must combine wisdom with courage**
 - ✓ **Willing to take risk**

“What kind of man would live where there is no daring? I don't believe in taking foolish chances, but nothing can be accomplished without taking any chance at all.”

– Charles Lindbergh





Decisive factors

- ✓ **Must combine wisdom with courage**
 - ✓ **Willing to take risk**
 - ✓ **Prudent but not hesitant**
 - ✓ **Have calculated the risk**
 - ✓ **Know advantages and disadvantages**
 - ✓ **Don't blunder into traps**
 - ✓ **Recognize opportunities and act**
- 



“Man emerges as the decisive factor in war. Weapons are important but not decisive. It is man's directing intelligence which counts most.”

– Mao T'se-tung²



You're the decisive factor

- ✓ **Knowledge**

- ✓ **Must be knowledgeable about yourself, your assets, strengths and weakness and must be knowledgeable about your enemies (what ifs)**

- ✓ **Directing intelligence**





You're the decisive factor

“Know the enemy and know yourself; in a hundred battles you will never be in peril.”

“When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.”

“If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril.”

– Sun Tzu²





You're the decisive factor

- ✓ **Essential to know strengths and weaknesses**
 - ✓ **Yourself — psychologically**
 - ✓ **Your operation**
 - ✓ **People you deal with**
 - ✓ **Your enemies — marketing systems**
- 



**“A victorious army wins its victories
before seeking battle.”
— Chen Hao²**



You're the decisive factor

- ✓ **Study**
 - ✓ **Know situation**
 - ✓ **Compare assets to requirements**
 - ✓ **Determine the odds of success**
 - ✓ **Decide to engage or not to engage**
- 



You're the decisive factor

- ✓ **Must**
 - ✓ **establish objectives**
 - ✓ **develop a plan**
 - ✓ **be specific – detailed**
 - ✓ **alternative strategies**
 - ✓ **establish odds of each**
- 



“The carrying out of a plan, from its very beginning to the conclusion of an operation, is another process of knowing the situation, i.e., the process of putting it into practice.”

– Mao T'se-tung²





You're the decisive factor

- ✓ **During implementation of the plan**
 - ✓ **Keep abreast of changes in the situation**
 - ✓ **market fluctuations**
 - ✓ **market demand**
 - ✓ **related technologies**
 - ✓ **government programs**
- 



“I now understand perfectly why the business world dreads a political change in administration. Whatever may have been the policy of one political party, the reverse becomes the slogan of the other on its promotion to power. For instance, a few years ago, the general government offered a bounty on the home product of sugar, stimulating the industry in Louisiana and Texas. A change of administration followed, the bounty was removed, and had not the insurance companies promptly canceled their risks on sugar mills, the losses by fire would have been appalling. Politics had never affected my occupation seriously; in fact I profited richly through the extravagance and mismanagement of the Reconstruction regime in Texas, and again met the defeat of my life at the hands of the general government.”

– Reed Anthony, Cowman 1907¹





You're the decisive factor

- ✓ **During implementation of the plan**
 - ✓ **Keep abreast of changes in the situation**
 - ✓ **market fluctuations**
 - ✓ **market demand**
 - ✓ **related technologies**
 - ✓ **government programs**
 - ✓ **Must react swiftly to opportunities and to obstacles.**
- 



“There are partial modifications in almost every operation, sometimes even a complete change. A hothead who does not know how to change his plan, or is unwilling to change it but acts blindly, will inevitably run his head against a brick wall.”

– Mao T'se-tung²





You're the decisive factor

- ✓ **Changes to plans are often difficult**
 - ✓ **Need benchmarks and mechanical indicators**
 - ✓ **The enemy is just like me and to win I must be one step ahead**
- 



“The requirements of generalship are a clear perception, a profound strategy coupled with far-reaching plans . . . A general unable to estimate his capabilities or comprehend the arts of expediency and flexibility when faced with the opportunity to engage the enemy will advance in a stumbling and hesitant manner, looking to the left and right and will be unable to produce a plan. Credulous, he will place confidence in unreliable reports .”

Duke Li ching of Wei²





You're the decisive factor

reasons for “wrong” decisions

- ✓ **Anchoring**
 - ✓ **Myopic loss aversion and regret**
 - ✓ **Fallacy of small numbers**
 - ✓ **Overconfidence**
 - ✓ **Hindsight bias**
- 



How to relate to marketing & risk management?

- ✓ **Know**
 - ✓ **who you are**
 - ✓ **what you are**
 - ✓ **what your goals are**
 - ✓ **what you are going to do**
- 



How to relate to marketing & risk management?

- ✓ **Develop plans with contingencies**
 - ✓ **Be confident — not overconfident**
 - ✓ **Realize not all decisions work out**
 - ✓ **Goal is to know when to advance and when to retreat**
- 



How many of you:

- ✓ **Have a clear perception of the situation?**
- ✓ **Develop a profound strategy coupled with far-reaching plans.**
- ✓ **Know yourselves – what makes you tick.**
- ✓ **Know your enemies – what makes them tick.**
- ✓ **Understand the “powers” that you have.**
- ✓ **Understand the “powers” others have.**
- ✓ **Know the alternatives & what they mean.**
- ✓ **Can determine the “odds” of success.**
- ✓ **Know what losing implies & can you afford the loss.**
- ✓ **Know what happens if you do not take the risk.**
- ✓ **Have the knowledge and wisdom to make decisions.**

This is what it takes to win!





“It is not the critic who counts; nor the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood, who strives valiantly; who errs and comes short again and again; because there is no effort without error and shortcomings; but who does actually strive to do the deed; who knows the great devotion, who spends himself in a worthy cause, who at the best knows in the end the triumph of high achievement and who at the worst, if he fails while daring greatly, knows that his place shall never be with those cold and timid souls who know neither victory nor defeat.”

– Theodore Roosevelt



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References

1. Adams, Andy. "Reed Anthony, Cowman."
2. Griffith, Samuel B. "Sun Tzu: The Art of War."

