

# Crop Diversification and Risk Management Strategies

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# Overview

- Trends and Challenges in US Agriculture
- Food and Produce Trends
- Marketing Channels/Options, Prices
- Risk and Risk Management Strategies
- Crop/Enterprise Diversification
- The Market Driven Enterprise Screening Tool
- Summary/Conclusions

# Trends/Challenges in US Agriculture

- Industrialization & globalization of agriculture
  - ✓ Increased competition & declining profit margins
- Escalating production costs
  - ✓ Cost of fuel, pesticides, land, water, energy, labor
- Increased urbanization and growth
  - ✓ Large number of farms in ag-urban interface
- Increased Regulations & Permits
  - ✓ Lengthy permitting process & regulatory compliance

# Trends/Challenges in US Agriculture

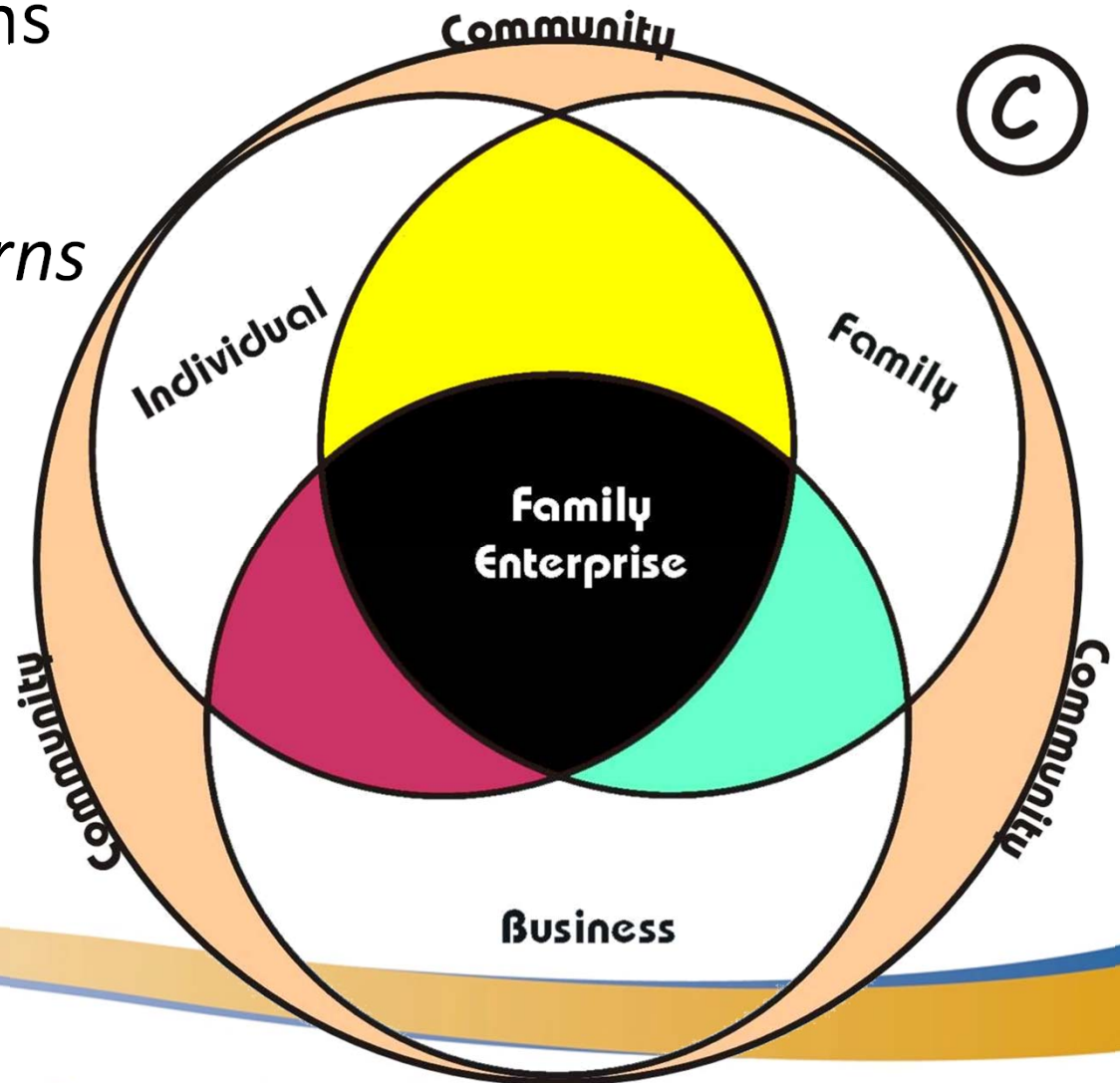
- Limited productive resources for agriculture
  - ✓ Water availability and prices, Land availability, quality and prices, Farm labor supply and cost
- New and Exotic Pests
  - ✓ Quarantines and access to markets, Limited/expensive control strategies

**It is not just about farming anymore...Success & profitability for urban/small scale operations depends upon many external factors!!**



# How to Measure Success?

- Business goals/returns
- Family goals/*returns*
- Individual goals/*returns*
- ***Community?***



# Food & Produce Trends

- ◆ Organic Foods
- ◆ Healthy(er) foods
- ◆ Restaurant & food industry trends
- ◆ Ethnic & religious foods
- ◆ Value added/convenience foods
- ◆ Value based marketing
- ◆ Local Foods

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# Organic Foods

- ◆ Organics has been the fastest growing sector in the produce industry for the past 20 years
- ◆ Organic food sales exceeded \$35 billion in 2014, with 11.3 % growth rate
- ◆ Fruit & vegetables represented 43.3 % of organic sales in 2014, followed by dairy with 14.6 %
- ◆ 38.83 million people claimed to have purchase organic food in 2014
- ◆ Organic prices for crops grown in Southern California (avocado, citrus, berries, etc.) still higher than conventional

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# Demand for Healthy Foods

- ◆ Demand for healthy, super foods continues to grow
- ◆ Health and nutritional benefits main driver behind expansion in many crops
  - ✓ Berries, primarily blueberries
  - ✓ Pomegranates
  - ✓ Pitahaya or Dragon Fruit
- ◆ Growers should capitalize on this trend and highlight health & nutritional benefits of the crops they grow



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# Restaurant & Food Industry Trends

<http://www.restaurant.org/News-Research/Research/What-s-Hot>

## Top Ten Food Trends for 2018

- New cuts of Meat
- House made condiments
- Street-food inspired dishes
- Ethnic-inspired breakfast items
- Sustainable seafood
- Healthy Kids meals
- Vegetable Carb Substitutes
- Uncommon herbs
- Authentic ethnic cuisine
- Ethnic spices

## Top Trends by Category

1. New cuts of meat
2. House-made condiments
3. Street food-inspired dishes
4. Ethnic-inspired breakfast items
5. Sustainable
6. Healthful kids' meals
7. Vegetable carb substitutes
8. Uncommon herbs
9. Authentic ethnic cuisine
10. Ethnic spices

### PRODUCE

1. Uncommon herbs
2. Hybrid fruit/vegetables
3. Heirloom fruit & vegetables
4. Exotic fruit
5. Superfruit

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### SWEETS

1. Thai-rolled ice cream
2. Doughnuts with non-traditional filling
3. Artisan/house-made ice cream
4. Savory desserts
5. Smoked dessert ingredients

restaurant  
concepts

5. Commissaries



# Ethnic & Religious Foods

- ◆ Hispanics buying power estimated at \$1.5 billion
- ◆ Large number of immigrants from Eastern Africa and the Middle East
- ◆ Demand for religious certifications increasing (Kosher, Halal, etc.)
- ◆ **Not all African Americans, Asian or Hispanic consumers are the same or have the same food preferences**



**Kosher**



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# Local Food Movement

- ◆ Local foods perceived as fresher, healthier, tastier, easier on the environment
- ◆ Consumers see local more important (52%) than organics & willing to pay more (?)
- ◆ Demand has grown exponentially
  - ✓ Number of CFMs in CA has grown from 1 in 1979 to >700 today & from 1755 in 1994 to 8144 in the US
- ◆ Local foods are changing the US food systems
  - ✓ Retailers & distributors are adapting, sourcing and promoting local products
  - ✓ Value-Based marketing

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# Travel and Tourism Trends

- ◆ Gamping / Glampling
- ◆ Food and Culinary Tourism
- ◆ The desire or Need to Unplug or Disconnect
- ◆ dsventurous millennials
- ◆ Staycations, traveling closer to home
- ◆ Voluntourism

Sources: (1) Fair, C. “2015 Tourism and Travel Trends” <http://www.slideshare.net/chrisfair/15-024-res-webinar-tourism-2020-high-res-opt>  
(2) Curtis, K. et. al. “Farm and Food Tourism: Exploring Opportunities.” <http://diverseag.org/htm/farm-and-food-tourism>

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# Marketing Channels/Options

## NCAT Marketing Tip Sheet Series

This publication contains 13 tip sheets, each of which describes a particular marketing channel and notes some of the considerations associated with that approach to marketing. Each tip sheet also provides additional resources about that marketing channel. These tip sheets are available to download from the ATTRA website as a packet, or individually.



Source: NCAT/ATTRA <https://attra.ncat.org/>

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# Direct Marketing

## Tips for Selling with: Agritourism and "Pick-Your-Own"

Agritourism combines agricultural sales with on-farm activities that involve the customers. These can include hayrides, mazes, pumpkin patches, farm tours, a bed and breakfast, or other endeavors.

"Pick-your-own" or "you-pick" operations allow customers to wander out

NCAT Marke

## Tips for Selling at: Roadside Stands

NCAT Marketing Tip Sheet Series

Roadside stands are physical structures located on a farm or along a nearby road where farmers sell produce, meat, eggs, dairy, or other products from the farm. The stands can be as simple as a small open-sided display with payment on the honor system, or as elaborate as a small grocery store.

## Tips for Selling through: CSAs — Community Supported Agriculture

NCAT Marketing Tip Sheet Series

CSA is a system of direct marketing where consumers pay the farmer at the beginning of the growing season for a weekly box of fresh fruits and vegetables. A CSA "share" is harvested and delivered to customers over a period of several months. CSAs may include meat, grain, flowers, or value-added products such as bread or cheese, in addition to fresh produce.

For this market you can expect:

- Lower volume of product
- Higher prices per unit

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★ key point

capital. eason starts, n. o share the risks of farming. ity products.

## Considerations

- ★ CSAs require thoughtful planning to maintain a continuous supply of crops.

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## Tips for Selling at: Farmers Market

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Farmers markets are temporary retail establishments typically held outdoors, where farmers come to sell their produce at a specified place and time. Farmers markets are growing in popularity across the country and can be a good entry-level selling place for beginning farmers.

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### Advantages

- You may receive more money per unit, to customers.
- You generally have flexibility in the var products you take to market.
- No standard pack or grade is required, should be good quality.
- Direct contact allows you to find out wh
- You have the opportunity to build a loy including local chefs.

### Considerations

- The volume of sales will vary with the p deliveries to other outlets in the area to
- Labor costs can be relatively high (time
- If you sell at several farmers markets, s
- To sell at popular farmers markets, it helps to have unique products.



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## Tips for Selling on: The Internet

The Internet is a communication and marketing tool that can provide exposure to a large number of potential customers. The Internet can be used to advertise your farm with pictures and maps, take orders online, show product availability, keep in touch with your existing customers, and support other ways of selling, such as CSAs or farmers markets. Farmers can have an Internet presence through their own website or by using a website run by a third party.

### Advantages

★ key point

- You can let a lot of people know about your farm, its history, product line, and location.
- You save time marketing and selling, since your website or web presence is always available to customers.
- A basic website can be developed with minimal instruction.
- Third-party websites can be used to provide web presence with minimal investment of your time or resources.

### Considerations

- There is less personal connection between customer and producer over the Internet.
- ★ An Internet presence requires regular maintenance.
- The Internet can be used to take and process orders, but this requires a more sophisticated website than one that simply advertises your farm and products.
- Know your closest, least expensive, most reliable shipping options. Can they ship cold?



# Direct Marketing

## ◆ Direct Marketing

- ✓ U-Pick & Agri-Tourism
- ✓ Farmers Markets
- ✓ Roadside Stands
- ✓ Community Supported Agriculture (CSA)
- ✓ Internet sales



**RETAIL**

- ◆ The skills needed are different (people skills)
- ◆ Management intensity is much higher
- ◆ Your story becomes as important as the produce you are selling
- ◆ Only you can decide if direct marketing is for you based on your goals and your plan

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# Other Market Options/Channels

## Tips 1 Tip Tip Tips for Selling to:

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## Tips Tips Tip Tips for Selling to: Wholesale Buyers at Terminal Markets

NCAT Marketing Tip Sheet Series

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Wholesale buyers are typically located in permanent stalls at a terminal market. Terminal markets are central sites, often in a metropolitan area, that serve as an assembly and trading place for agricultural commodities. Wholesale buyers will purchase products from farmers, brokers, or packing houses in large quantities, and resell it

into the open marketplace. Prices of products, cooling considerations, and time of delivery are all negotiated before farmers bring their products to the docks.

For this market you can expect:

- Higher volume of product
- Lower prices per unit

 = \$ \$ \$

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### Advantages

★ key point

- Buyers can handle large deliveries of produce.
- Generally, pre-negotiated prices are more stable with wholesale buyers, however prices are not guaranteed.

### Considerations

- You can sell a larger quantity, but expect a lower price per unit.
- ★ Wholesale buyers typically pay within 30 days. You must determine how this will affect your cash flow.
- Farmers can set the price, but the buyer must agree to it. Farmers must have a good idea of what the going prices are in the wholesale market. See fifth Tip, next page.

product, but it is not guaranteed. The farmer will get paid a percentage of the price the packing house receives for the sale.



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# Market & Price Info

- USDA-AMS Market Report

<https://www.ams.usda.gov>

- Market News
- Fruit and Vegetables
- Fruits
- Dragon Fruit (Red Pitaya)

– From here you can refine the report by market, date, etc.

- Rodale Institute Organic Price Index

<https://rodaleinstitute.org/farm/organic-price-report/>

- USDA-ERS Organic Price Reports:

<https://www.ers.usda.gov/data-products/organic-prices.aspx>

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# PACKING/MARKETING





# What is Risk?

Possibility

EXPOSURE

Threat

DANGER

Jeopardy

peril

Chance

Consequence

ENDANGER

GAMBLE

Hazard

Menace

# What is Agricultural Risk?

- Risk is...*the possibility of adversity or loss, and refers to “uncertainty that matters.”*

*USDA/ERS Managing Risk in Farming: Concepts, Research and Analysis (1999)*

- Agricultural Risk is “the probability that an unpredictable event occurs which will negatively affect your farm business.”
  - Reduce productivity and annual income
  - Impact your financial situation & repayment capacity
  - Affect your personal or family satisfaction and wellbeing

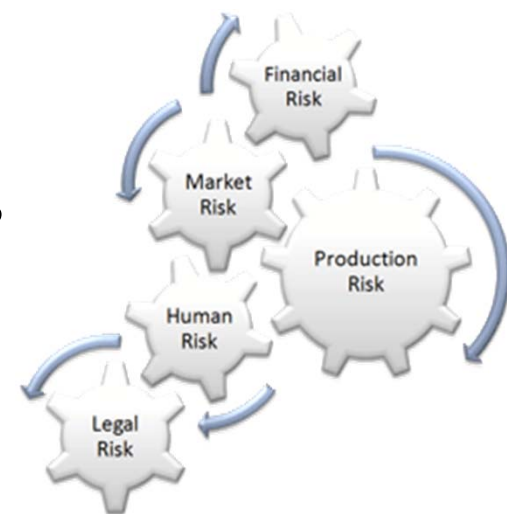


# What is your Risk Tolerance?

- **Do you see yourself as Risk Averse or Risk Taker?**
- **Assessing your Risk Tolerance and Assessing your risks will help**
  - Identify and select/exclude crop alternatives with greater exposure to unacceptable risks
  - Guide your decision making process
  - Guide providers of risk management services to offer the best options for you, if desired
  - Improve likelihood you will select the best combination of crops/enterprises and risk management strategies

# Sources or Types of Risk


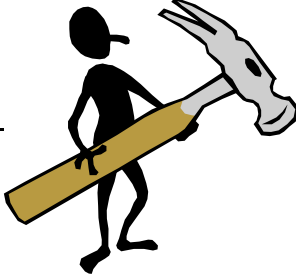


- **Production Risk** – affects yields & quality
- **Market or Price Risk** – changes in prices for inputs/outputs or market conditions
- **Financial Risk** – Changes in income, debt to asset ratio, repayment capacity
- **Human Resource Risk** – Labor availability & management
- **Legal/Institutional Risk** – changes in policies and regulations, contractual agreements
- **Business Interruption Risk** – loss of income due to weather, natural disasters



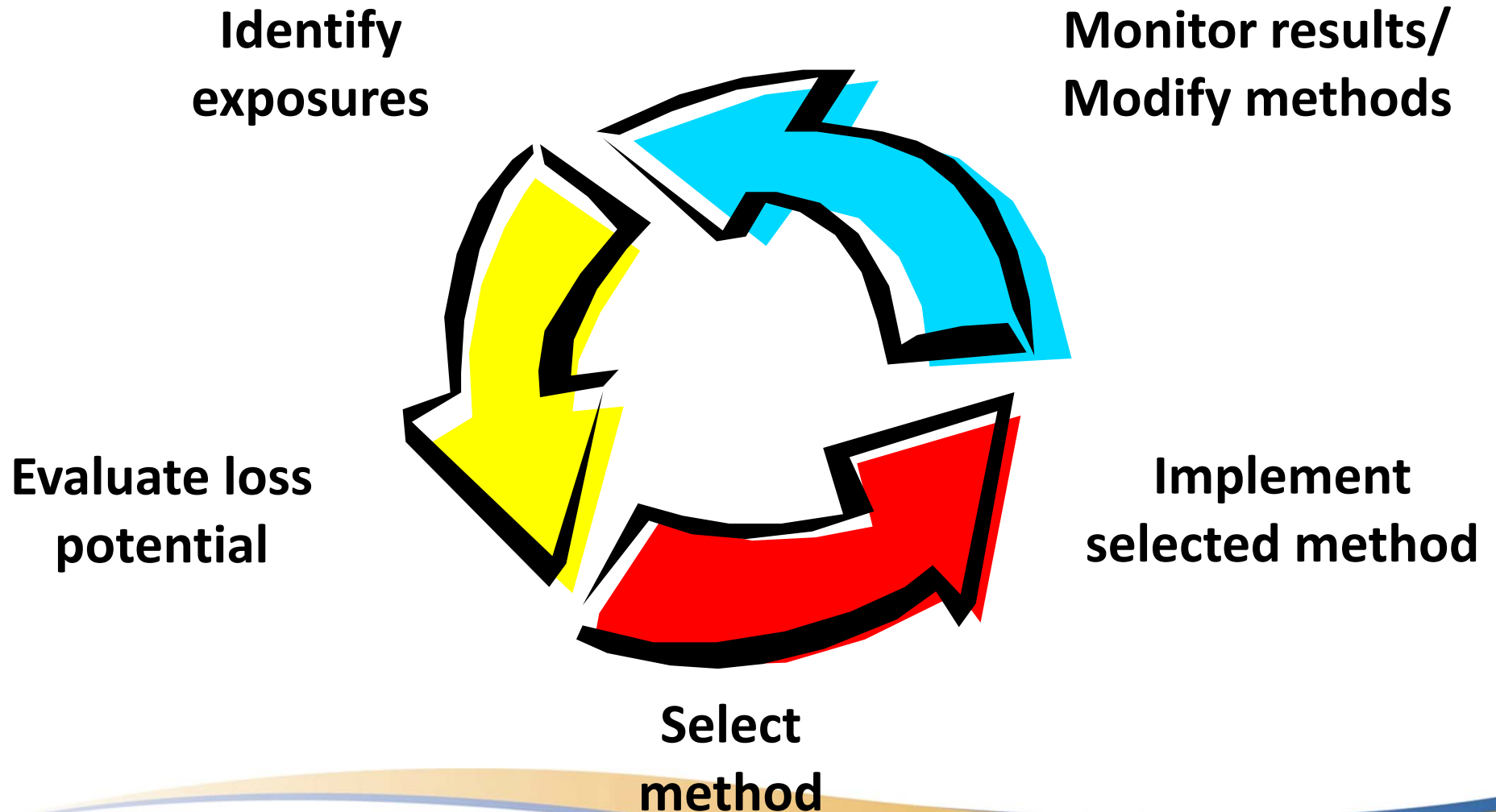
# What is Risk Management?

- Process of choosing among alternatives to reduce the financial effects of risk or uncertainties
- Conscious effort of planning, organizing, directing, and controlling resources and activities.
- Requires the evaluation of tradeoffs between changes in risk, expected returns
- Entrepreneurial freedom and other variables

# Risk management strategies

- **Avoid** \_\_\_\_\_ 
- **Reduce/Mitigate** \_\_\_\_\_ 
- **Transfer** \_\_\_\_\_ 
- **Assume** \_\_\_\_\_ 

# The Risk Management Decision Process Never Ends



# Risk Management Method Matrix

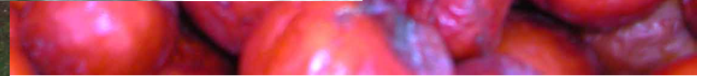
Illustrates which risk management method to use based on the severity and frequency combination

Risk Management Method Matrix		
	LOW SEVERITY	HIGH SEVERITY
LOW FREQUENCY	Reduce or Accept	Reduce or Accept
HIGH FREQUENCY	Reduce or Transfer	Reduce, Transfer or Avoid

# What about New, Specialty or Alternative Crops?

**A new or specialty crop is one that is not commonly grown in a region, one that is produced in a different season, or it is produced using different production systems or techniques.**













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# Crop/Enterprise Diversification

- Commonly used risk management strategy
  - ✓ Adding production alternatives to the mix to keep operations economically viable
- Identifying, evaluating & selecting new/specialty crops can be difficult and intimidating
  - ✓ May have limited access to resources, information
  - ✓ Information on new/alternative crops may be limited, or not available at all
- May increase uncertainty and risk exposure for farmers/producers



# The Ideal New or Alternatives Crop

- ✓ Large target/potential market
- ✓ Extended production & marketing season
- ✓ Complementary to the farm operation
- ✓ Difficult to grow (steep learning curve)
- ✓ Expensive to start or get into (high initial capital investment)
- ✓ Potential for value-adding activities, multiple uses for the crop

# Finding New or Alternative Crops

- On farm Research & Development?
- Looking around – people, neighborhoods, farmers markets?
- Following trends – health, food, economics?
- Following market & price data?
- Following the regulatory process?
- Calling the Farm Advisor or Extension Agent?

# Evaluating New or Alternative Crops

- Market data, research, and analysis...what is the potential?
- Crop adaptation to your specific location?
- Is the crop right for you? Could you grow it?
- Pest and disease problems?
- Is anybody else growing it...why not? What is the competition?
- Supporting infrastructure and facilities...is it a good fit for your farm/area?
- Let your research (or your instinct) guide you!!

# First, Better or Different?

- **Being First...**Tapping into new markets, introduce new crops or products, adopt new production techniques, get to market earlier, get higher prices
- **Being Better...**Be the best grower, effective on cost-per-unit basis, Keep production costs down and maintain high yields, know customer needs, access new markets, be ready to make changes as needed in response to changing trends
- **Being Different...**Differentiate, make your farm or products stand out, grow something different or differently, diversify products and services, do what others are not willing to do or do not know about, capture more of the consumer dollars



# Market Driven Enterprise Screening Tool

- Intended to help growers assess potential of new crop/enterprise alternatives
- Organized into three sections:
  - Descriptive Section
  - Comparison worksheet
  - Profit seeker example comparing three possible alternatives
- Emphasis on market issues



UC Small Farm Program Preliminary Publication



## A Market-Driven Enterprise Screening Guide

Ramiro Lobo, Farm Advisor, University of California Cooperative Extension, San Diego  
Larry Lev, Professor and Extension Marketing Specialist, Oregon State University  
Stuart Nakamoto, Extension Economist, University of Hawaii at Manoa



### Introduction

The industrialization and globalization of agriculture has resulted in increased competition and declining profit margins for agricultural producers. This situation, combined with escalating production costs (resulting from high land values, expensive water, increased regulations, urban sprawl, and high energy and labor costs), paints a very difficult picture for small- and medium-scale agricultural producers and family farms in the United States.



Small- and medium-scale producers must learn to operate in a new business environment in which the success and profitability of agricultural operations is more and more dependent on factors external to the operation. When looking at production, marketing, financial, legal, and human resource issues, farmers must increase their ability to deal with the diverse risks that impact their existing agricultural business and any new, potentially profitable farming opportunities they identify. Enterprise diversification, production contracts, marketing contracts, crop insurance, and financial reserves are examples of strategies and tools that growers can use to manage risks in their agricultural operations. However, the strategies and tools selected to manage risk will depend on the values, goals and risk attitude of the farm operator.



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# Market Driven Enterprise Screening Tool

- Descriptive Section/Situation Analysis
- Crop Screening Worksheets
  - Marketing Section (18 questions)
  - Information Section (5 questions)
  - Production Section (3 questions)
  - Resource Section (8 questions)
  - Risk Management Section (4 questions)
- Priority Ranking & Decision Making

# Market Driven Enterprise Screening Tool

- Descriptive Section/Situation Analysis
  1. Describe in as great detail as possible the product that you are considering producing.
  2. For each alternative crop, describe your target, based on (a) Consumer(s) and Market and outlet(s), and (b) Season(s)
  3. What special requirements, problems, barriers, or risks do you anticipate in producing and marketing this product?
  4. Who are/will be your competitors?
  5. What are your competitive advantages, if any, in producing this new crop? Consider your competitors, location, regulations, seasonality, production costs, and others.

# Market Driven Enterprise Screening Tool

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# Get Your Act Together!!

## 10 Things a Buyer/Distributor Wants (from Frieda's Finest)

Understand your customer's business	Labeling and Trace Back
Participate in Marketing	Food Safety and Insurance
Don't be Greedy	Quality Control
Target Dates and Yield Estimates	Pack Size & Pricing
Post-Harvest Control	Variety & Flavor

**Success in agriculture depends on marketing what you grow at a profit. Do your homework, develop a business/marketing/food safety plan and spend time talking to prospective buyers or consumers!!**

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# Conclusions

- Growers must always be alert to pick up market signals
- No one single best way to assess the potential of new/specialty crops
- Evaluating new/specialty crops versus farm resources is critical
- Follow your instincts or your research
- Always try to be first, do it differently or do it better than everyone else!!

# Resources/References

- ◆ UCCE San Diego - <http://cesandiego.ucdavis.edu>
- ◆ SD County Ag. Dept. - <https://www.sandiegocounty.gov/awm/>
- ◆ UC Small Farm Center - <http://Sfc.ucdavis.edu>
- ◆ UC SAREP - <http://www.sarep.ucdavis.edu/>
- ◆ UC Cost and Return Studies - <http://coststudies.ucdavis.edu>
- ◆ NCAT/ATTRA - <https://attra.ncat.org/>
- ◆ National Restaurant Association - <http://www.restaurant.org>
- ◆ USDA Ag. Marketing Service - <http://www.ams.usda.gov/>
- ◆ Ag Marketing Resource Center - <http://www.agmrc.org/>
- ◆ Univ. of Maryland Extension - [https://  
www.extension.umd.edu/agmarketing](https://www.extension.umd.edu/agmarketing)
- ◆ Western Extension Marketing Committee - <http://cals.arizona.edu/arec/wemc/>

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# Questions? Comments?

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