

# San Diego County Farmers: Challenges and Opportunities

Ramiro Lobo

Farm Advisors, UCCE San Diego County

**CLIMATE ACTION AND AGRICULTURE SYMPOSIUM**

San Marcos, CA

May 30, 2019

**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# Presentation Overview

- ◆ San Diego County Agriculture
- ◆ San Diego County Grower Needs Assessment
- ◆ Challenges to Local Farmers
- ◆ Assets & Opportunities for Local Agriculture
- ◆ Concluding Comments

**Small/Numerous** **Innovative**

**Different**

**UNIQUE**

**High Value**

**Urban**

**Adaptive**

**Diverse**

**Expensive!**

**Hobby Farms**

**Not Your**

**HIGH TECH**

**Average Farm**

**What Used to be!**

University of California  
Agriculture and Natural Resources

# About San Diego County:

## ◆ Location and Size

- ✓ 4200 square miles, with 300,000 acres in agricultural production
- ✓ Most Southwestern County, next to busiest border crossing in the World

## ◆ Great Weather/Climate

- ✓ Described as most nearly perfect in the USA
- ✓ Mediterranean...warm winters and cool summers

## ◆ Urbanized County

- ✓ 5<sup>th</sup> most populous county in the US with 17<sup>th</sup> largest agricultural economy
- ✓ Affluent and educated customer base

## ◆ Diverse Topography & Microclimates

- ✓ 30 types of vegetation communities
- ✓ Year round production with 200+ crops grown

**University of California**  
Agriculture and Natural Resources



# San Diego County Agriculture:

- ◆ **Large Number of High Value Crops Produced**
  - ✓ 200 crops grown commercially with 44 valued at more than \$ 1 mill/year
  - ✓ Highest dollar value/acre in California
- ◆ **Prominent Ranking at State and National level**
  - ✓ Number one nationally in value of nursery, floriculture, and avocados
  - ✓ 5<sup>th</sup> largest industry (behind Defense, Manufacturing, Tourism & Biotech)
- ◆ **Expensive Irrigation Water**
  - ✓ \$1200/acre feet is highest in the USA
  - ✓ 25 Irrigation districts in the county, limited & poor quality ground water
- ◆ **Expensive Agricultural Land**
  - ✓ Land prices driven by real estate value
  - ✓ Poor soils, mostly decomposed granite

**University of California**  
Agriculture and Natural Resources

# Growers Needs Assessment

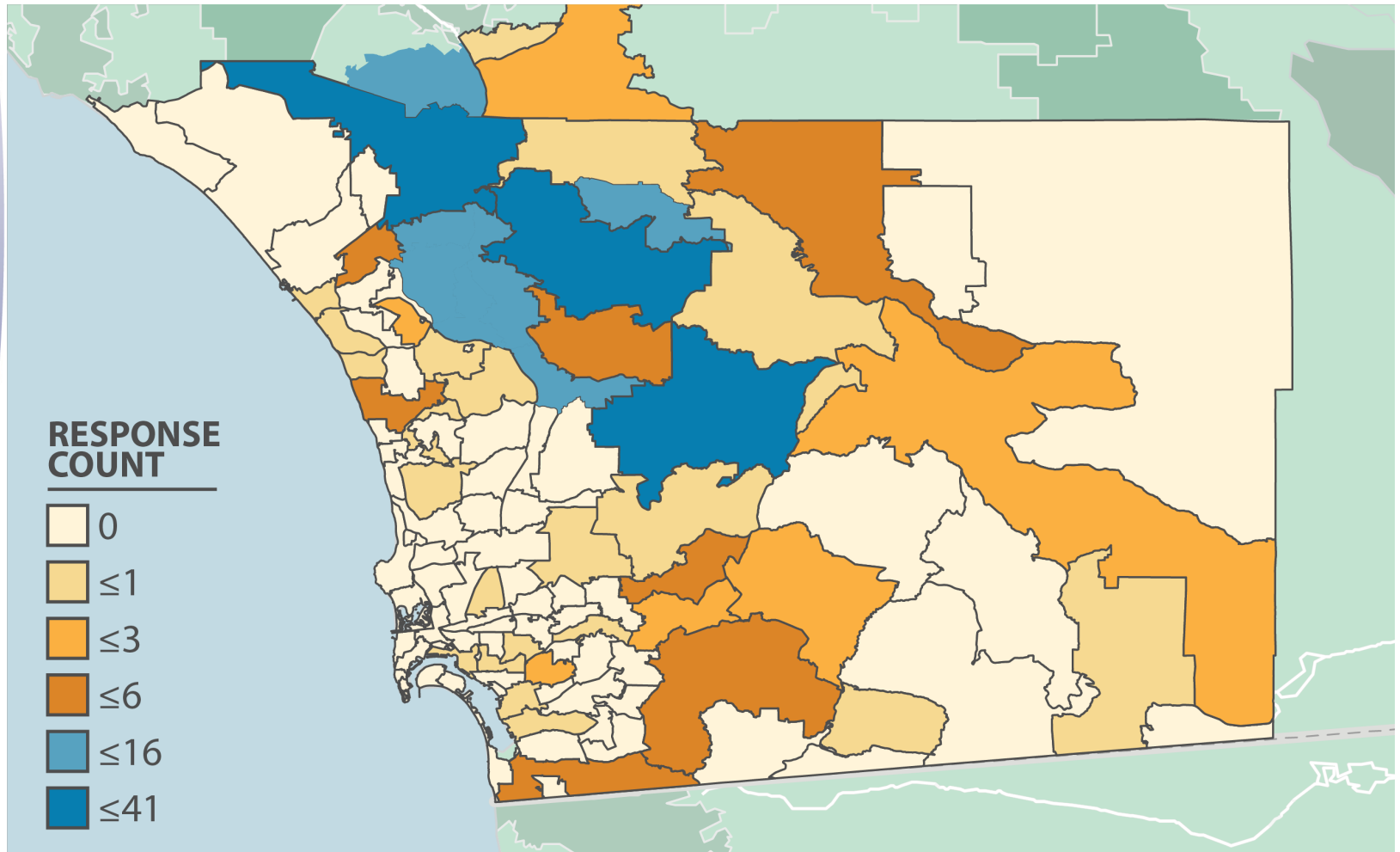
- **Methods:**

- Descriptive Cross Sectional census survey
- Survey developed with local stakeholder input
- Administered using Qualtrics
- Targeted commercial farm operators/managers
- 86 questions, 8 core topics

- **Results:**

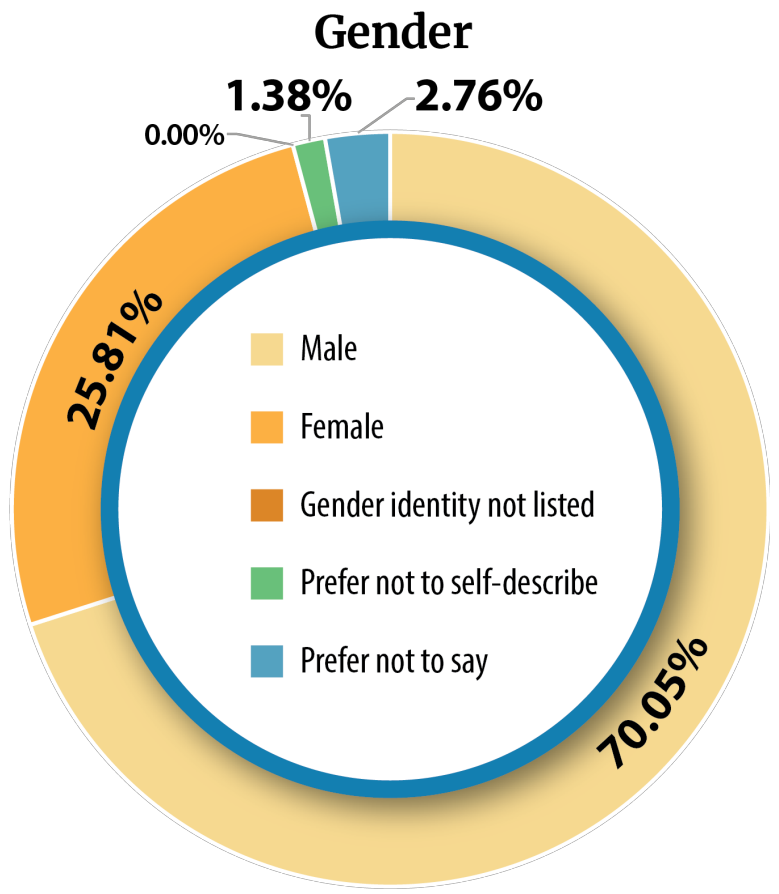
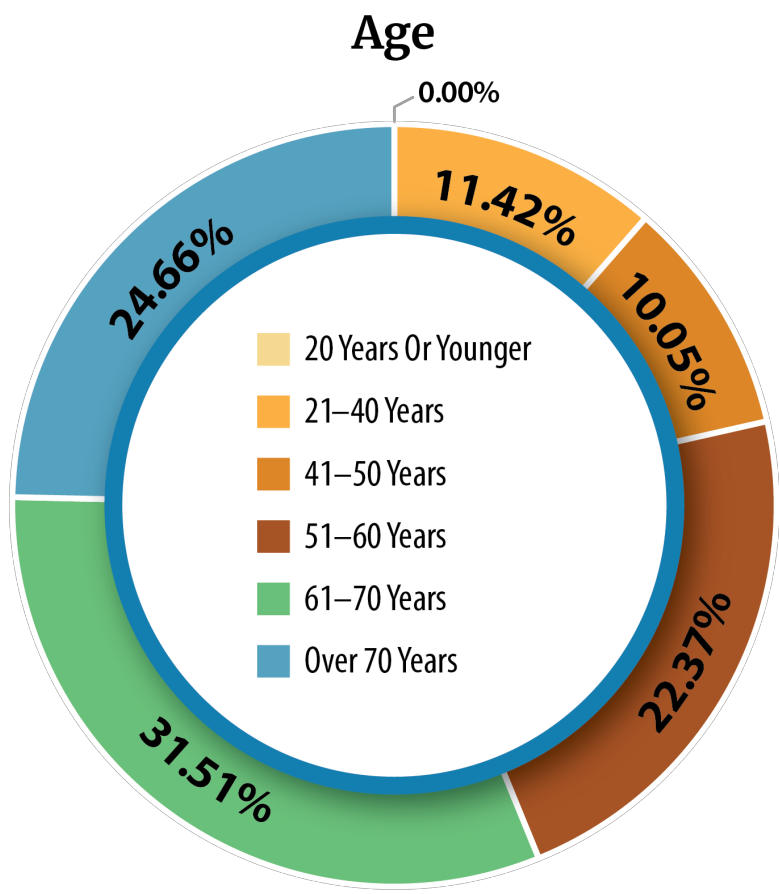
- 296 valid responses, representing an 18.4 response rate
- Good representation of small/large & urban/rural farms

# Geographic Location of Farms



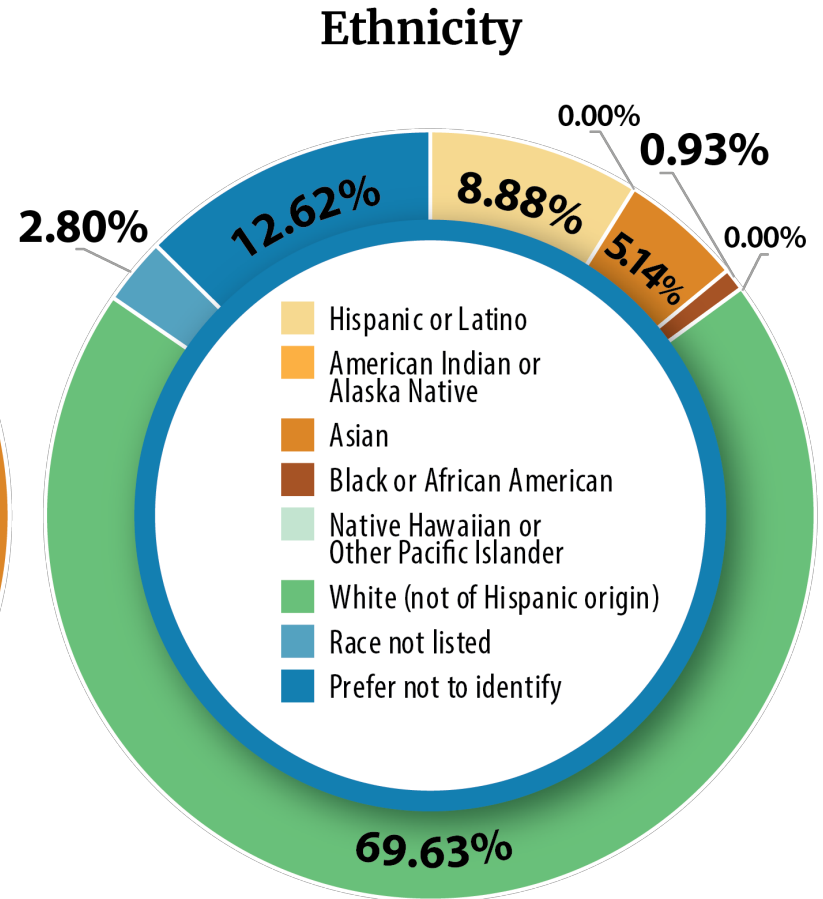
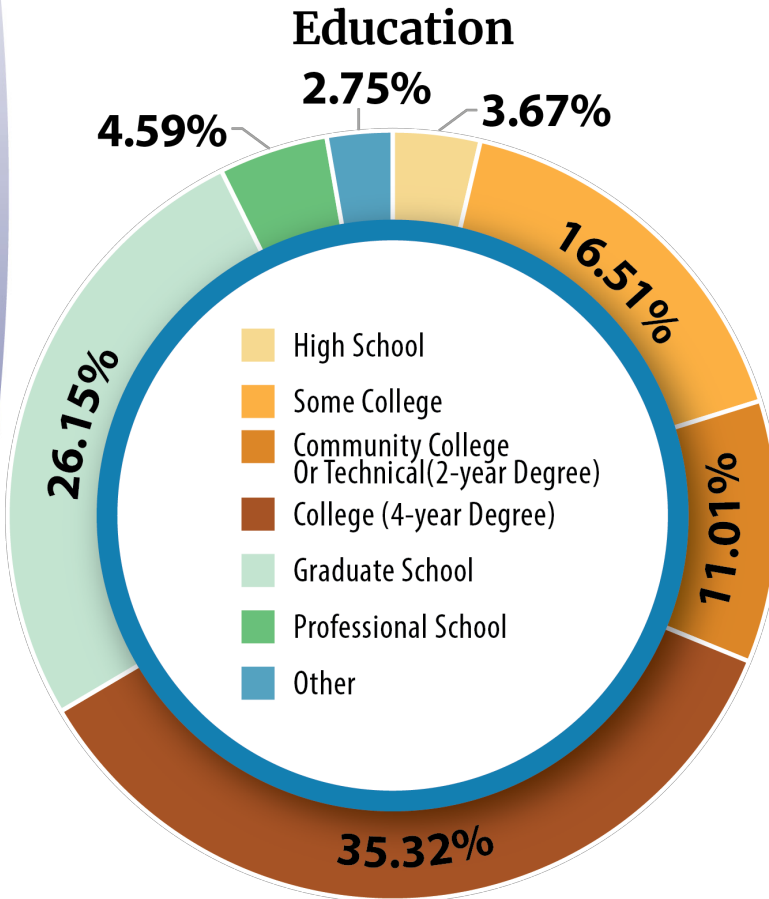
**University of California**  
Agriculture and Natural Resources

# Age and Gender Distribution



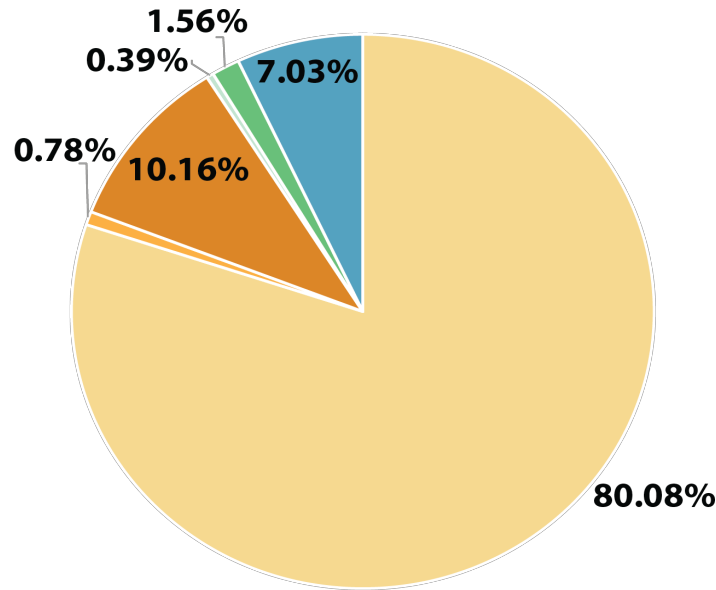
**University of California**  
Agriculture and Natural Resources

# Education and Ethnic Breakdown

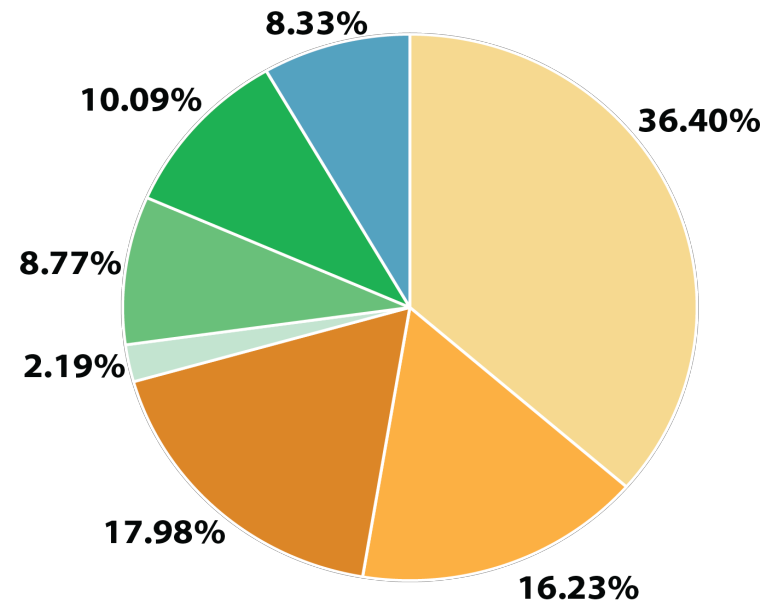


**University of California**  
Agriculture and Natural Resources

# Primary Role & Production Systems



- Owner Operator
- Absentee Owner
- Farm/Grove Manager
- Agricultural Production
- Pest Control Adviser (PCA)
- Other:

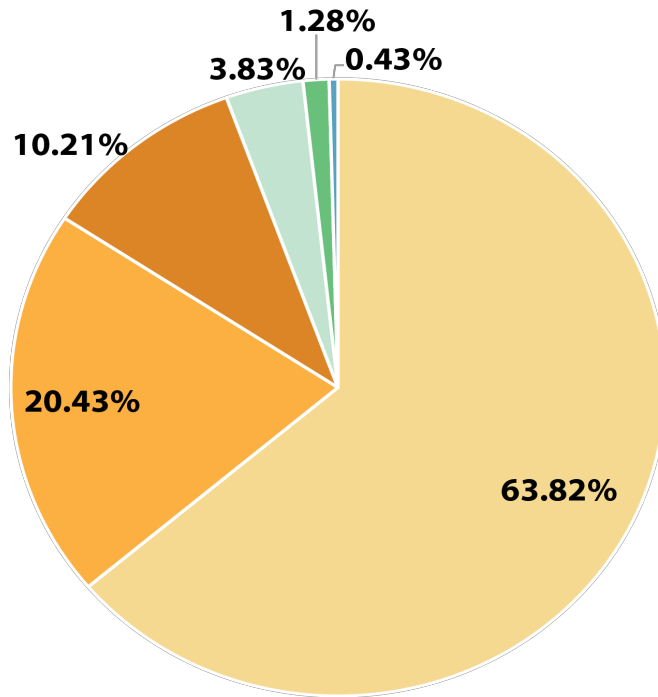


- Conventional Farming and not in transition to organic
- Certified Organic Farming
- Organic Farming, but not "certified"
- Transitional to organic (actively implementing farming practices towards achieving organic certification)
- Controlled Environment
- Mix (e.g. organic and conventional)
- Other:

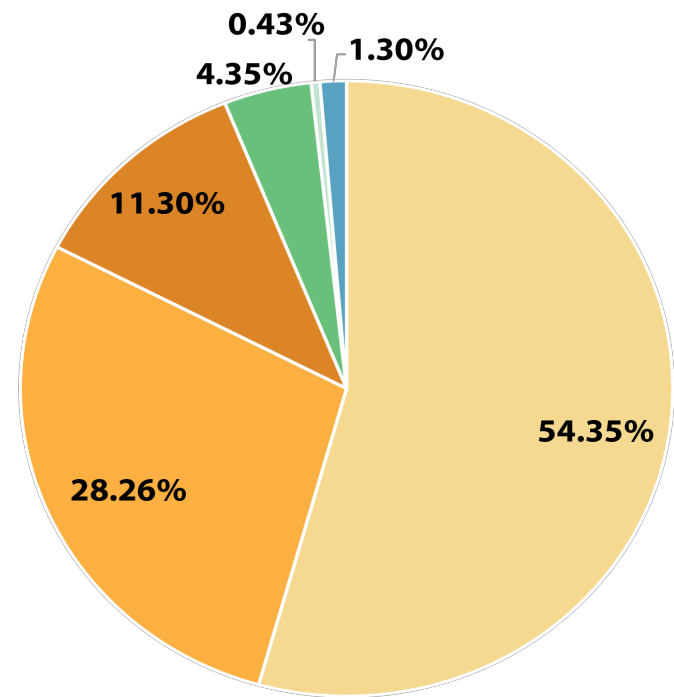
**University of California**  
Agriculture and Natural Resources

# Acres Farmed/Owned

## Acres Currently Farmed



## Acres Owned or Controlled

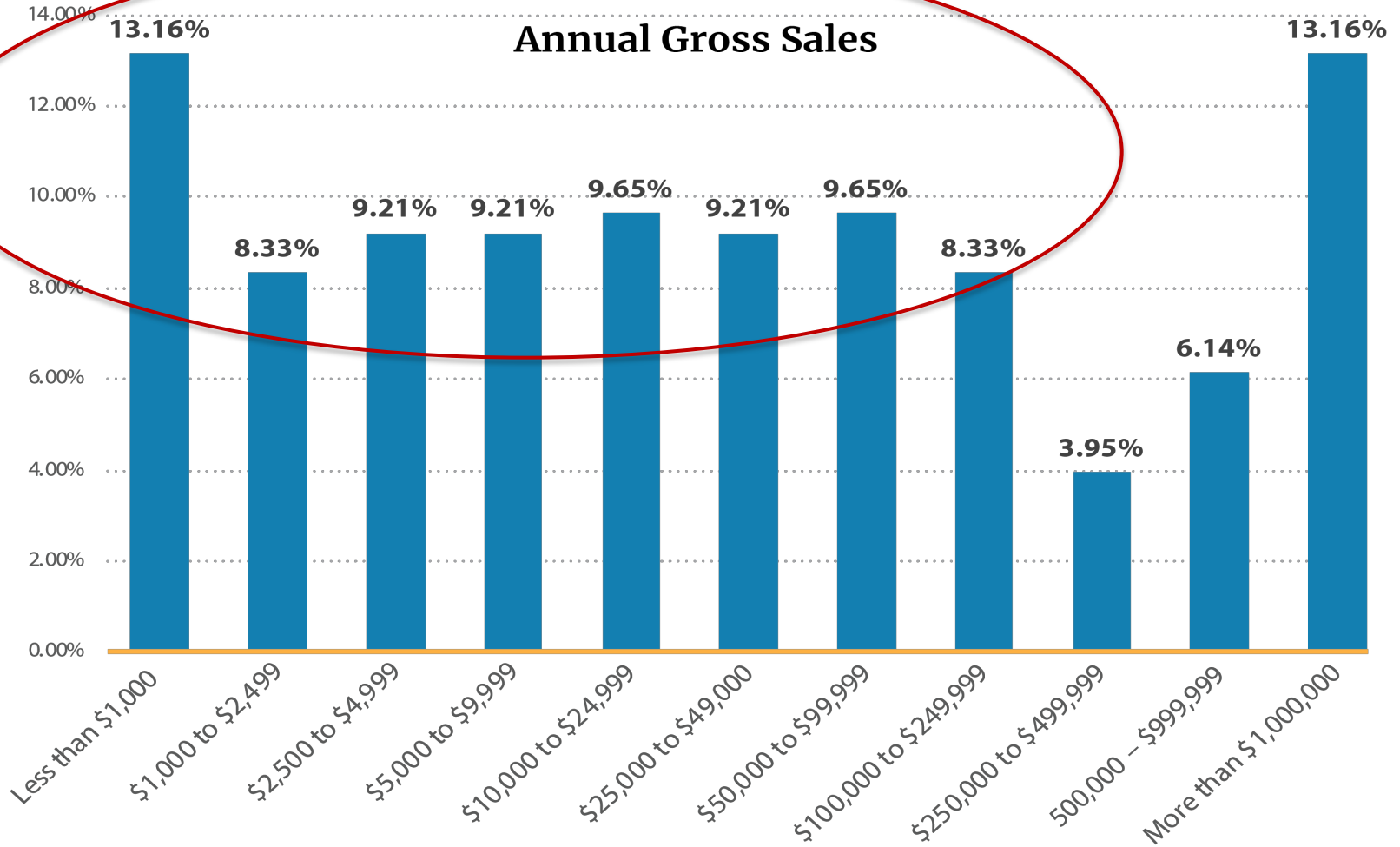


- 0 to 9 acres
- 10 to 49 acres
- 50 to 179 acres

- 180 to 499 acres
- 500 to 999 acres
- 1,000 acres or more

**University of California**  
Agriculture and Natural Resources

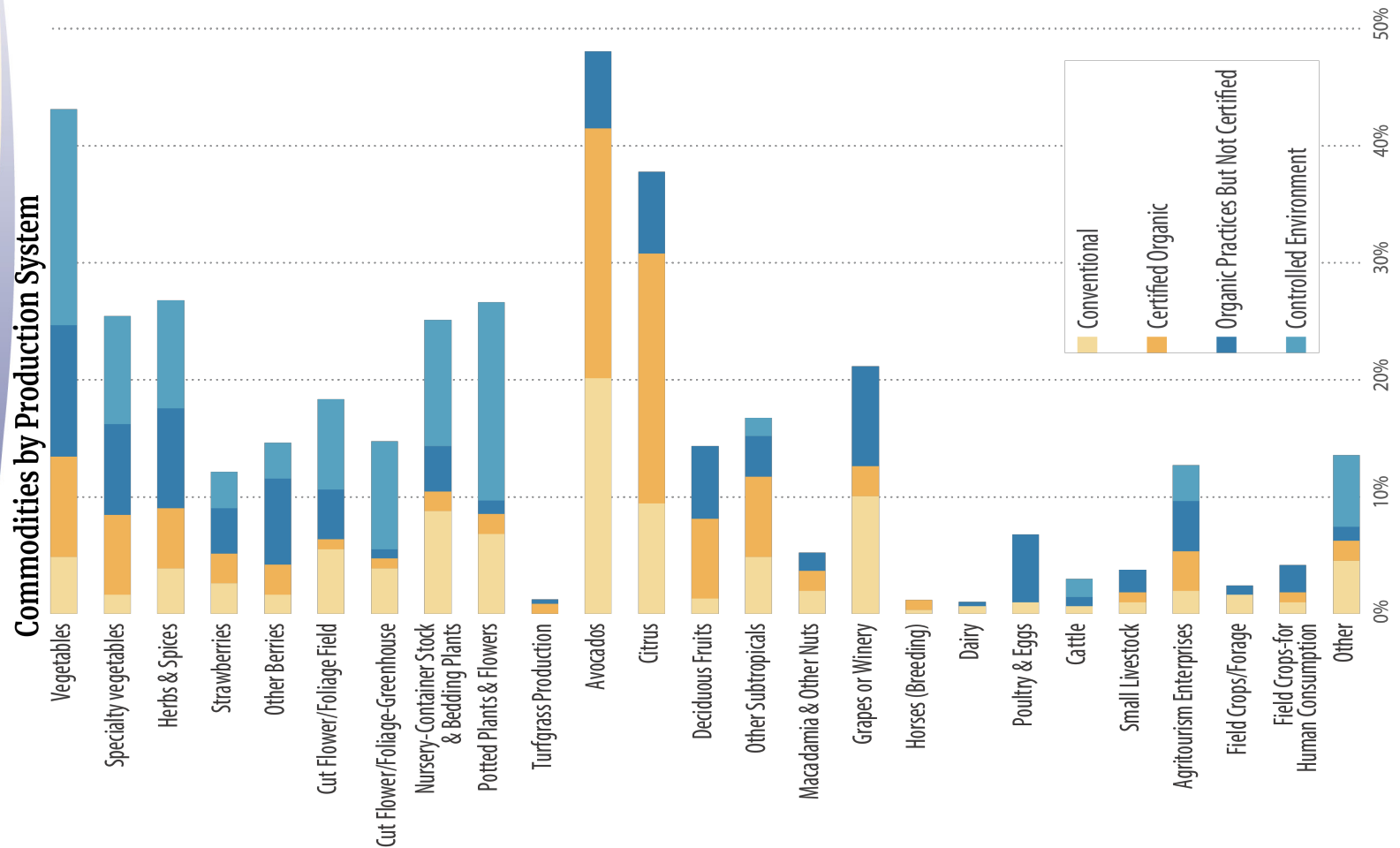
# Annual Gross Sales by Farm



**University of California**  
Agriculture and Natural Resources



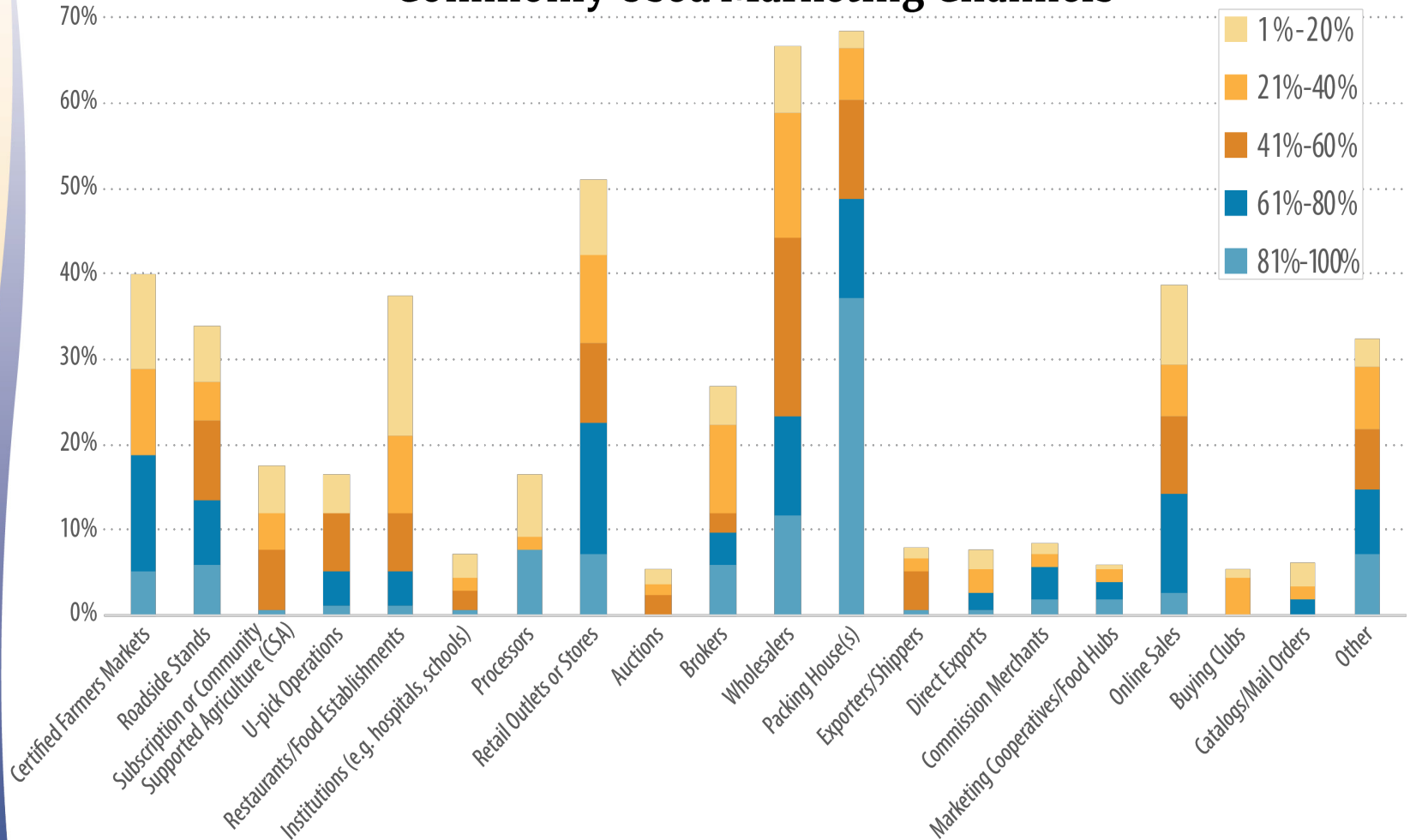
# Commodity by Production System



**University of California**  
Agriculture and Natural Resources

# Marketing Channels Used

## Commonly Used Marketing Channels

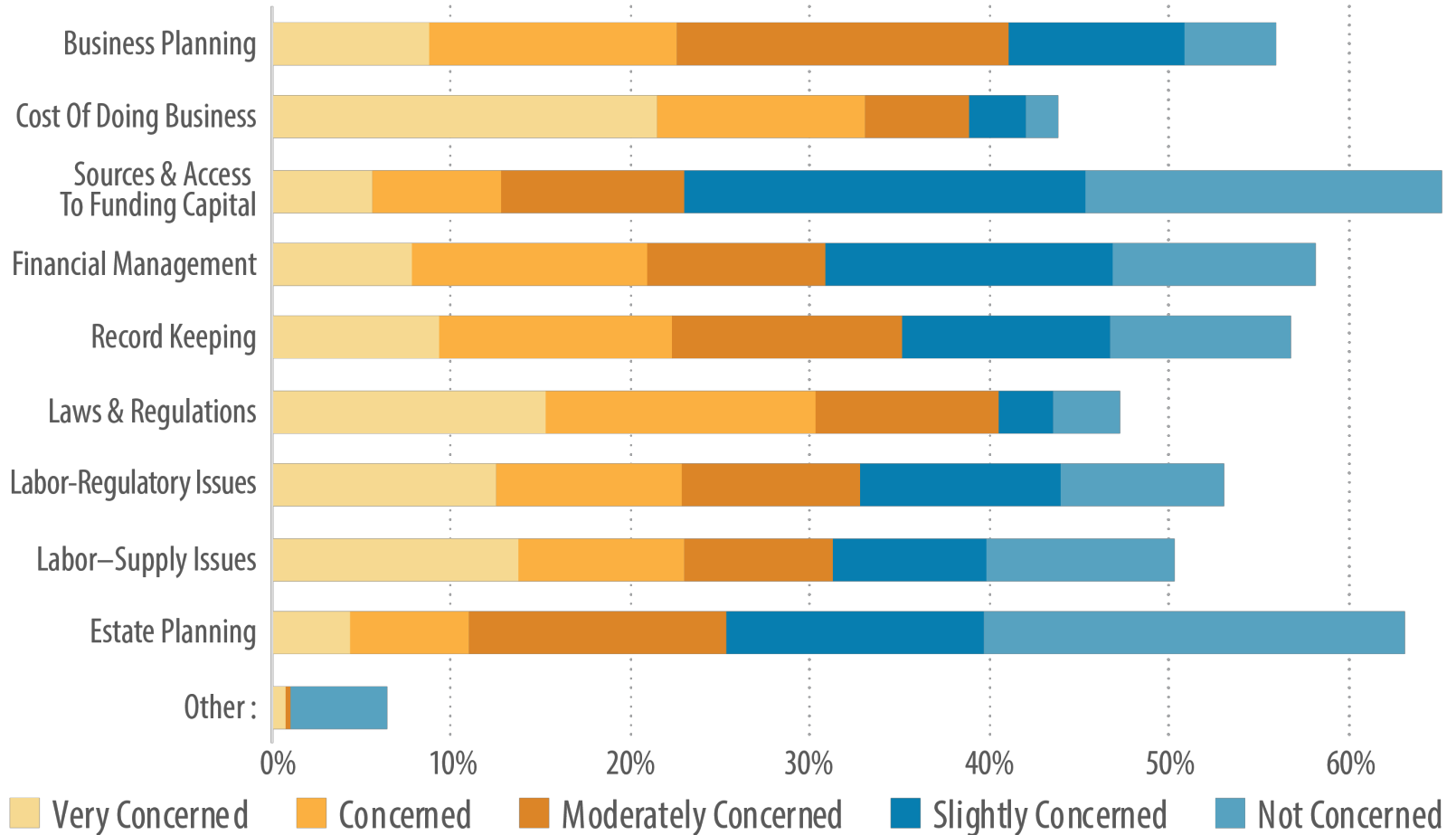


**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# Business & Financial Issues

## Business & Financial Concerns

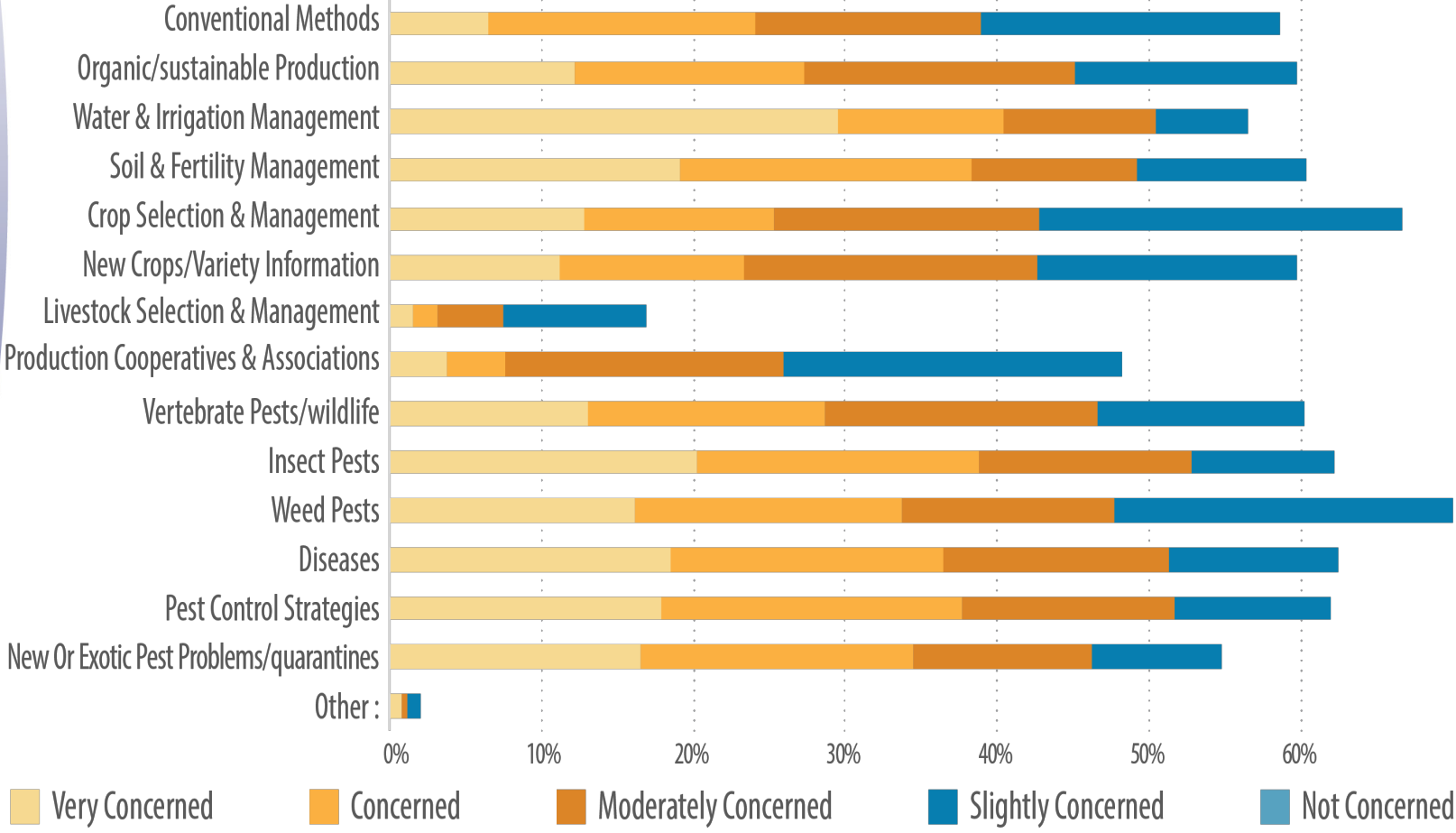


**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# Farm Production Issues

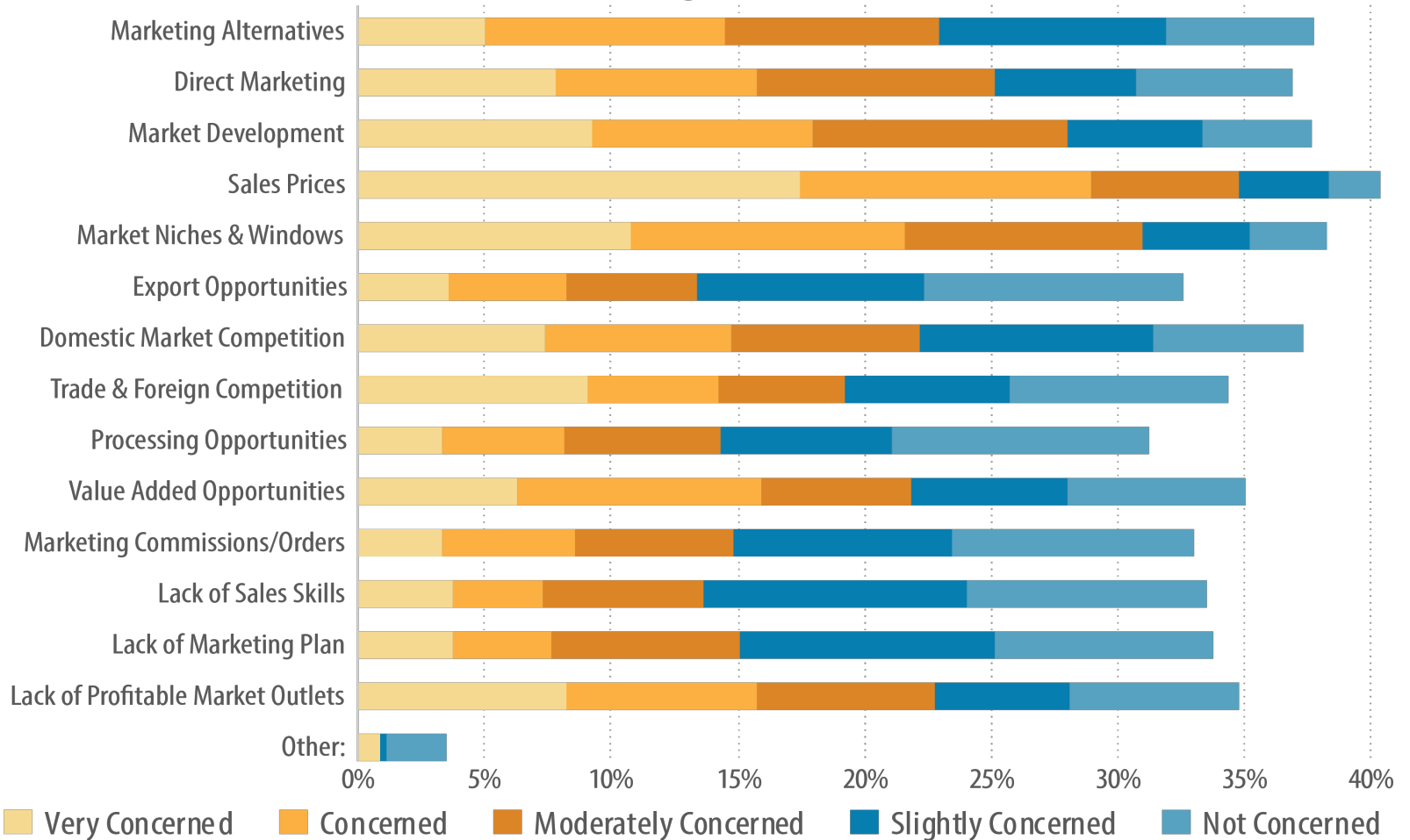
## Farm Production Concerns



**University of California**  
Agriculture and Natural Resources

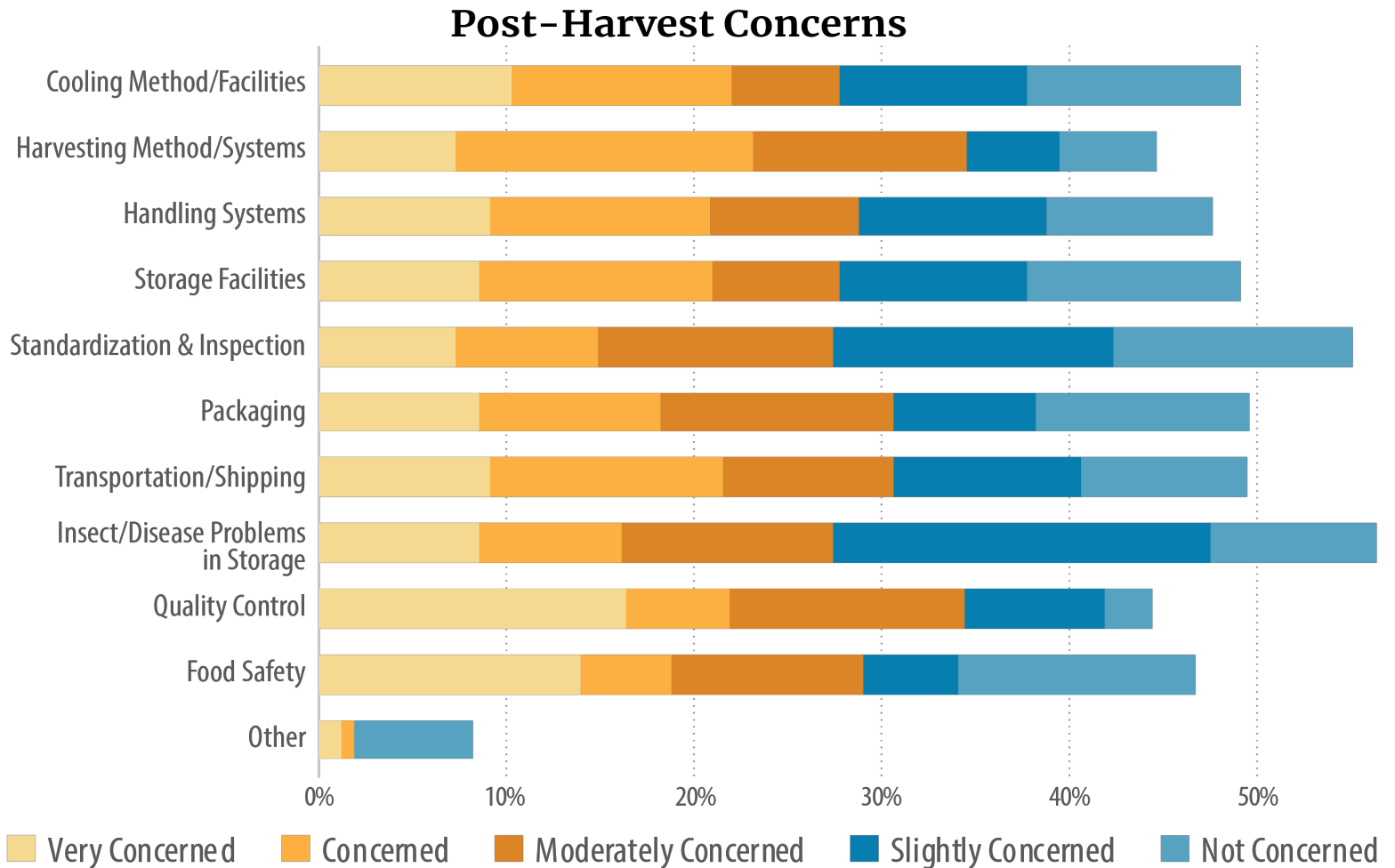
# Marketing Issues

## Marketing Concerns



**University of California**  
Agriculture and Natural Resources

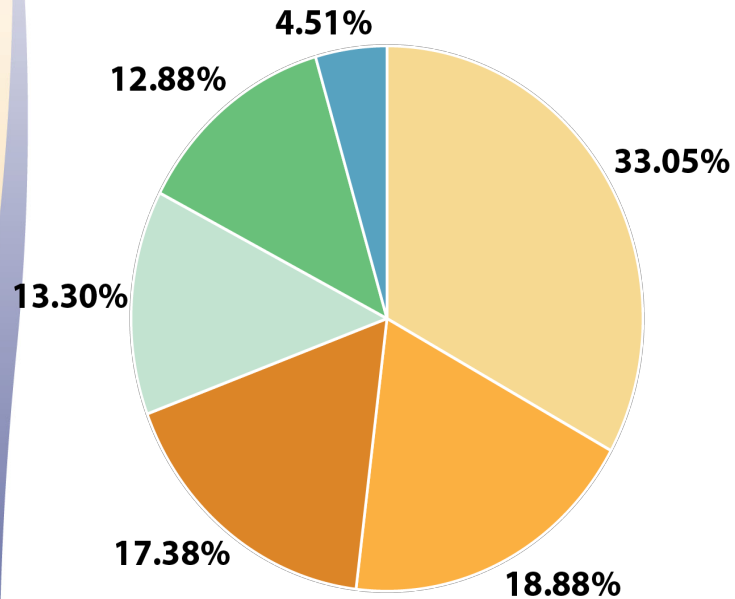
# Post-Harvest Management Issues



**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# Water Management Issues



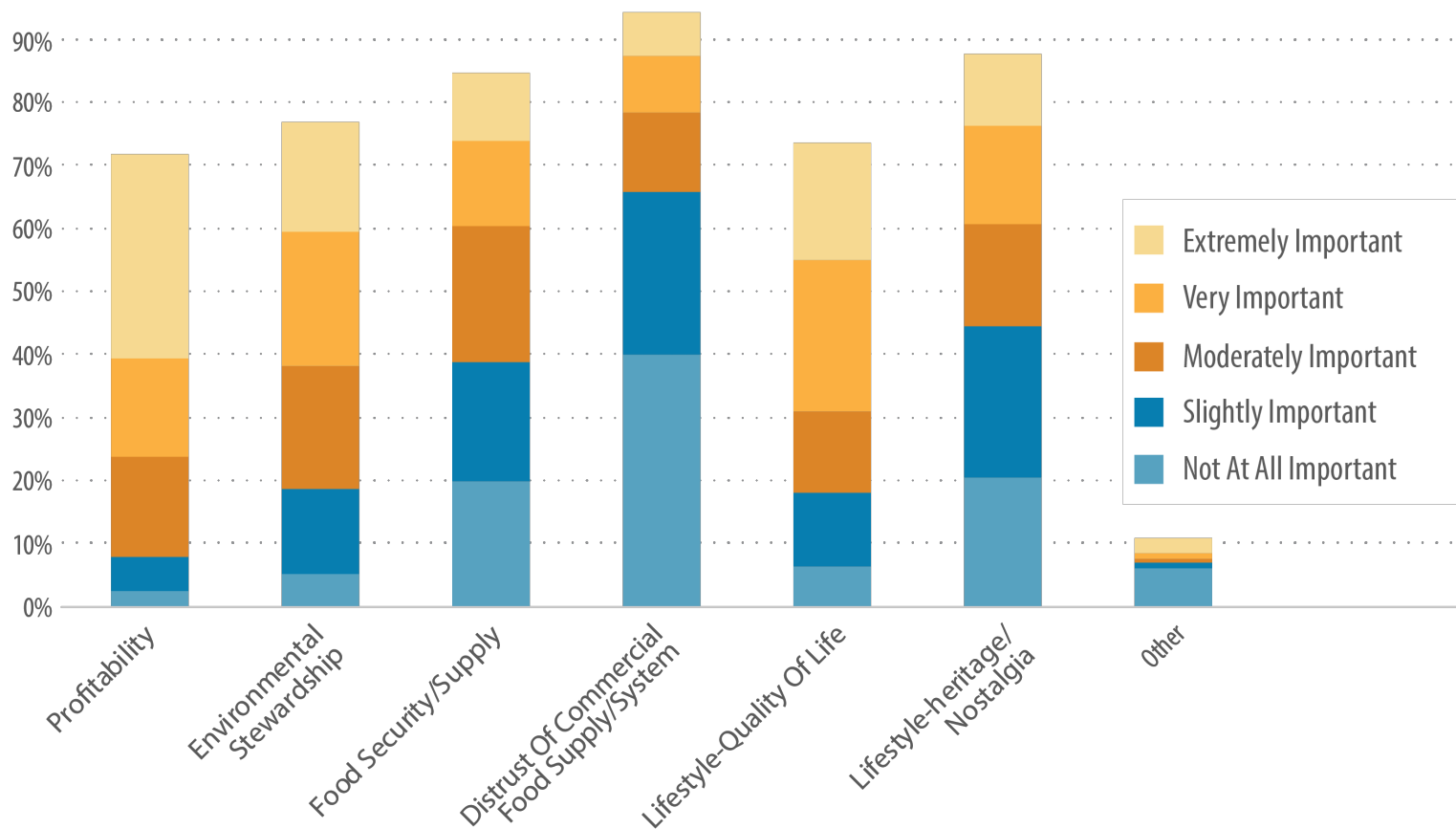
## Water Management Needs

- Irrigation Technology & Equipment
- Irrigation Management Assessment
- Training On Current Research & Best Management Practices
- Testing Services For Water Quality & Runoff
- Access To Technical Experts
- Other

**University of California**  
Agriculture and Natural Resources

# What Motivates Farmers?

## Motives Influencing Farming Decisions



**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS



# Other Facts About Local Farmers

- 74 % of respondents or significant other receive non-farm income
- 76 % use smart phones and computers to manage their farm operations
- 55 % use outside labor and 64 % manage their own hiring vs. use of labor contractors
- 48 % responded that cost is most significant barrier to adopt new farming practices
- 74 % expressed a desire to expand under profitable market conditions
- Most access information through online sources

**University of California**  
Agriculture and Natural Resources

# Major Challenges Identified

- ◆ Land and Water availability and prices
- ◆ Imports/Foreign Competition
- ◆ Growth and Urbanization
- ◆ Aging farmers/Succession planning
- ◆ Laws and Regulations
- ◆ Exotic pest problems/quarantines
- ◆ Farm labor supply, regulations and costs
- ◆ Declining profits (low prices/high costs)

**University of California**  
Agriculture and Natural Resources

# Assets & Opportunities

- ◆ County demographics/ethnic diversity
- ◆ Large local and/or regional markets
- ◆ Well developed Infrastructure
- ◆ Market trends/Marketing opportunities
- ◆ Opportunities for value-added activities
- ◆ Excellent climate, year-round production
- ◆ Favorable regulatory environment (AB551 Urban Agriculture, AB1616 Cottage Foods, AB1258 Farm Stays)
- ◆ Educated consumers willing to support local farms

**University of California**  
Agriculture and Natural Resources



**University of California**  
Agriculture and Natural Resources

UC Cooperative Extension, San Diego

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# The Future of Local Agriculture?



**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# Questions/Comments:

Ramiro Lobo

Farms Advisor, UCCE San Diego

9335 Hazard Way, Suite 201

San Diego, CA 92123

Phone: 858.246.1860

<http://cesandiego.ucdavis.edu>

Email: [relobo@ucanr.edu](mailto:relobo@ucanr.edu)

**University of California**  
Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS



**University of California**  
Agriculture and Natural Resources

**HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS**



**University of California**  
Agriculture and Natural Resources

**HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS**



# San Diego County Farmers

- ◆ The typical farmer in San Diego is a highly educated white male over 50 years of age with an off-farm job or income.
- ◆ **Other facts about local farmers:**
  - Most are knowledgeable and experienced growers
  - Most (87%) farmers own the land they farm
  - Most (71%) use conventional production methods and marketing channels
  - Most use computers in their farm operations

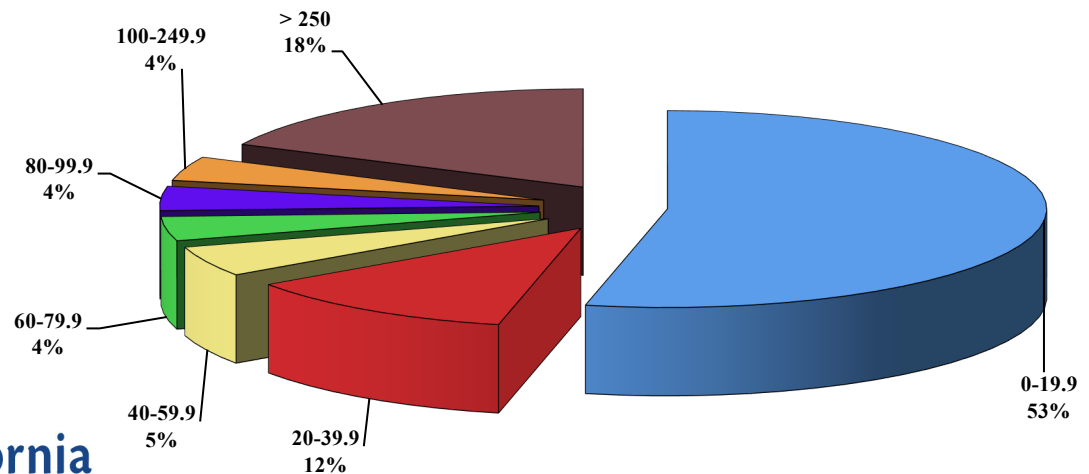
# San Diego County Agriculture:

## ◆ Farms are Small and numerous

- ✓ 6687 farms in 2011, largest number in US
- ✓ 68 % of Farms are 9 acres or less with a median size of 4 acres
- ✓ Large number of female operators (27 %)

## ◆ 82 % of Farms are Small using USDA def.

Gross Sales per Farm Operation  
(US \$ 1000s)

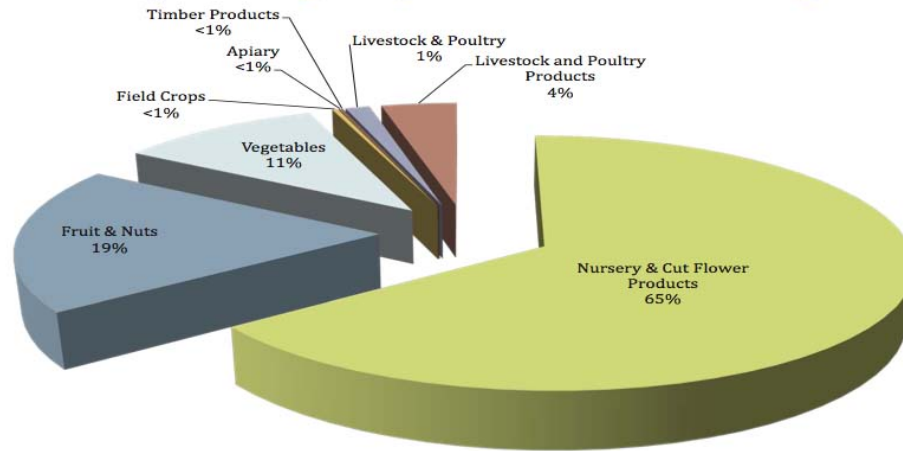


# San Diego County Agriculture

## Summary of Major Categories

Crop	Year	Acres	Total Value
Nursery & Cut Flower Products	2011	12,173	\$1,092,916,550
	2010	12,606	\$1,107,558,336
Fruit & Nuts	2011	33,838	\$319,205,955
	2010	36,239	\$257,548,442
Vegetables	2011	6,686	\$177,013,955
Field Crops			
Apiary			
Timber Products			
Livestock & Poultry			
Livestock and Poultry Products			
<b>Grand Totals</b>			

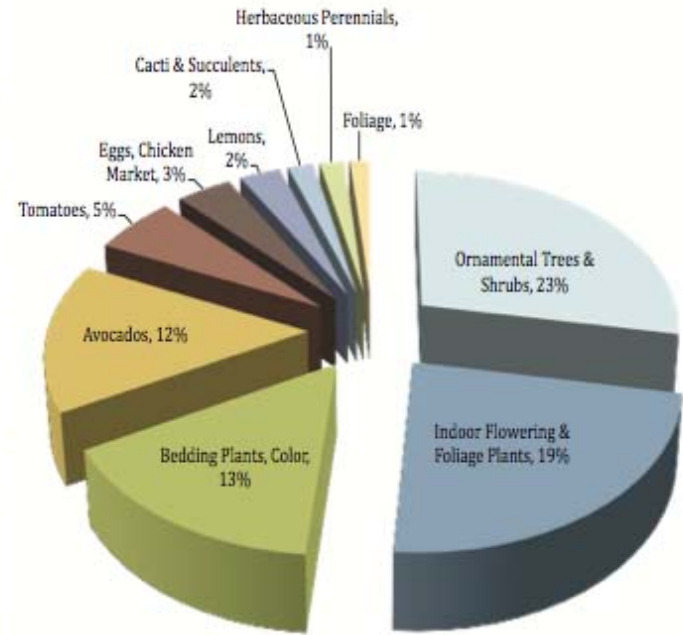
## Major Crops By Overall Percentage



# San Diego County Agriculture

## 2011 Top Ten Crop Values and Percent

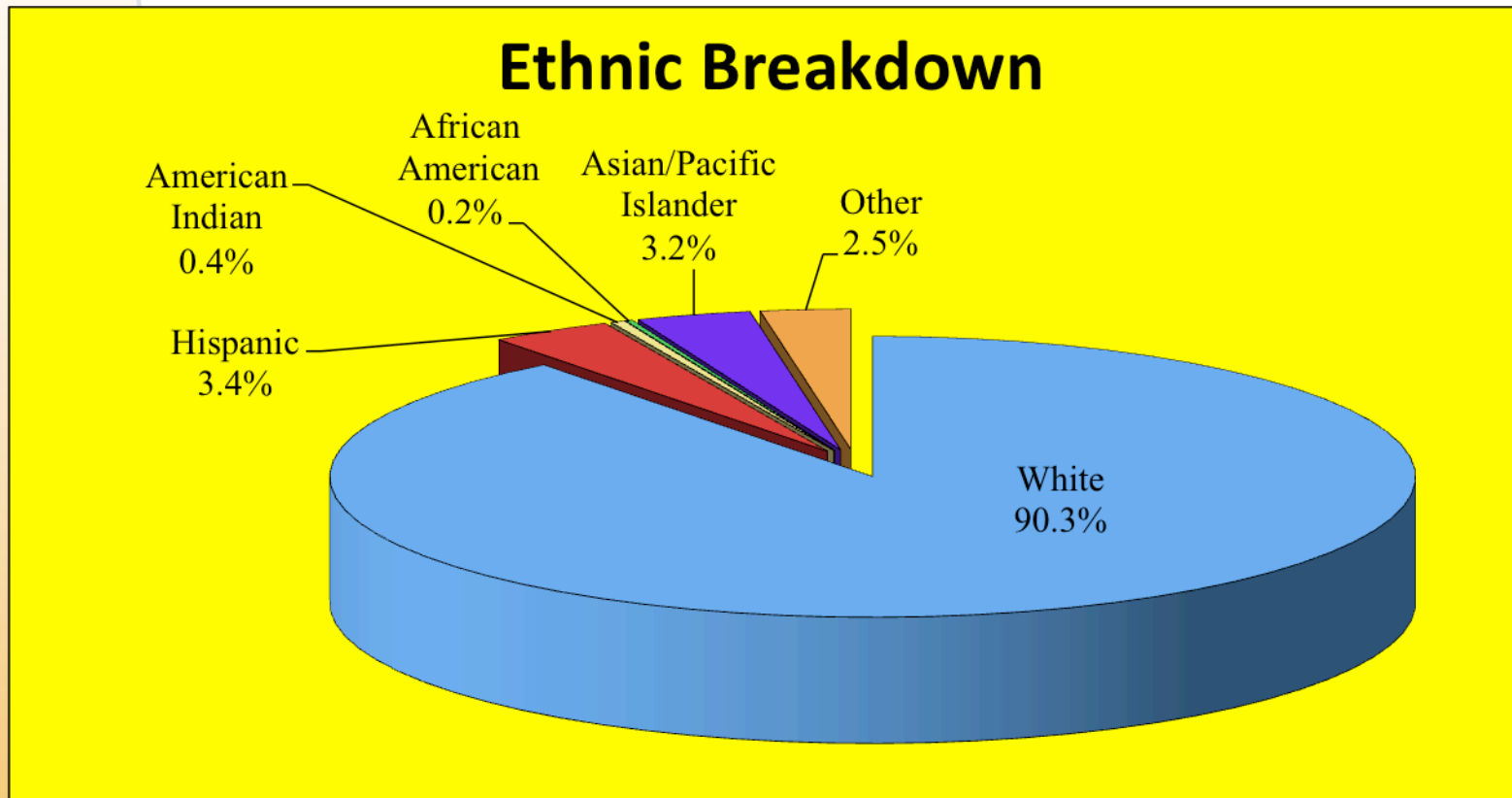
Crop	2011 Value	2010 Value
Ornamental Trees & Shrubs	\$384,433,569	\$418,841,523
Indoor Flowering & Foliage Plants	\$320,850,000	\$292,500,000
Bedding Plants, Color	\$213,900,000	\$214,941,018
Avocados	\$208,131,027	\$147,051,864
Tomatoes	\$81,899,165	\$86,774,565
Eggs, Chicken Market	\$54,665,626	\$75,904,920
Lemons	\$40,718,400	\$39,885,636
Cacti & Succulents	\$25,333,188	\$25,153,520
Herbaceous Perennials	\$24,125,273	\$26,235,355
Foliage	\$19,938,534	\$19,986,120



Adapted from San Diego County Agricultural Commissioner's 2010 County Crop Report

**University of California**  
Agriculture and Natural Resources

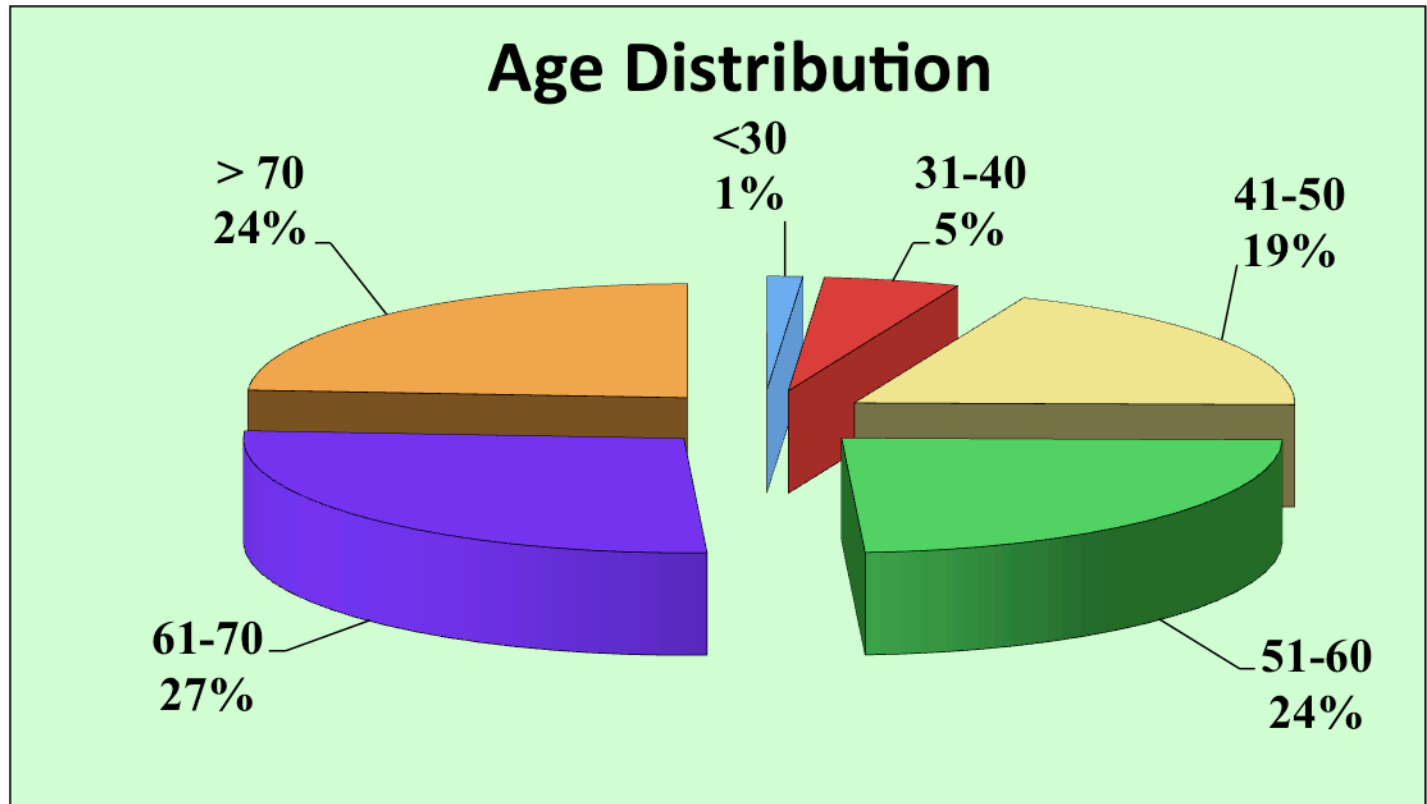
# About San Diego County Farmers:



**University of California**  
Agriculture and Natural Resources

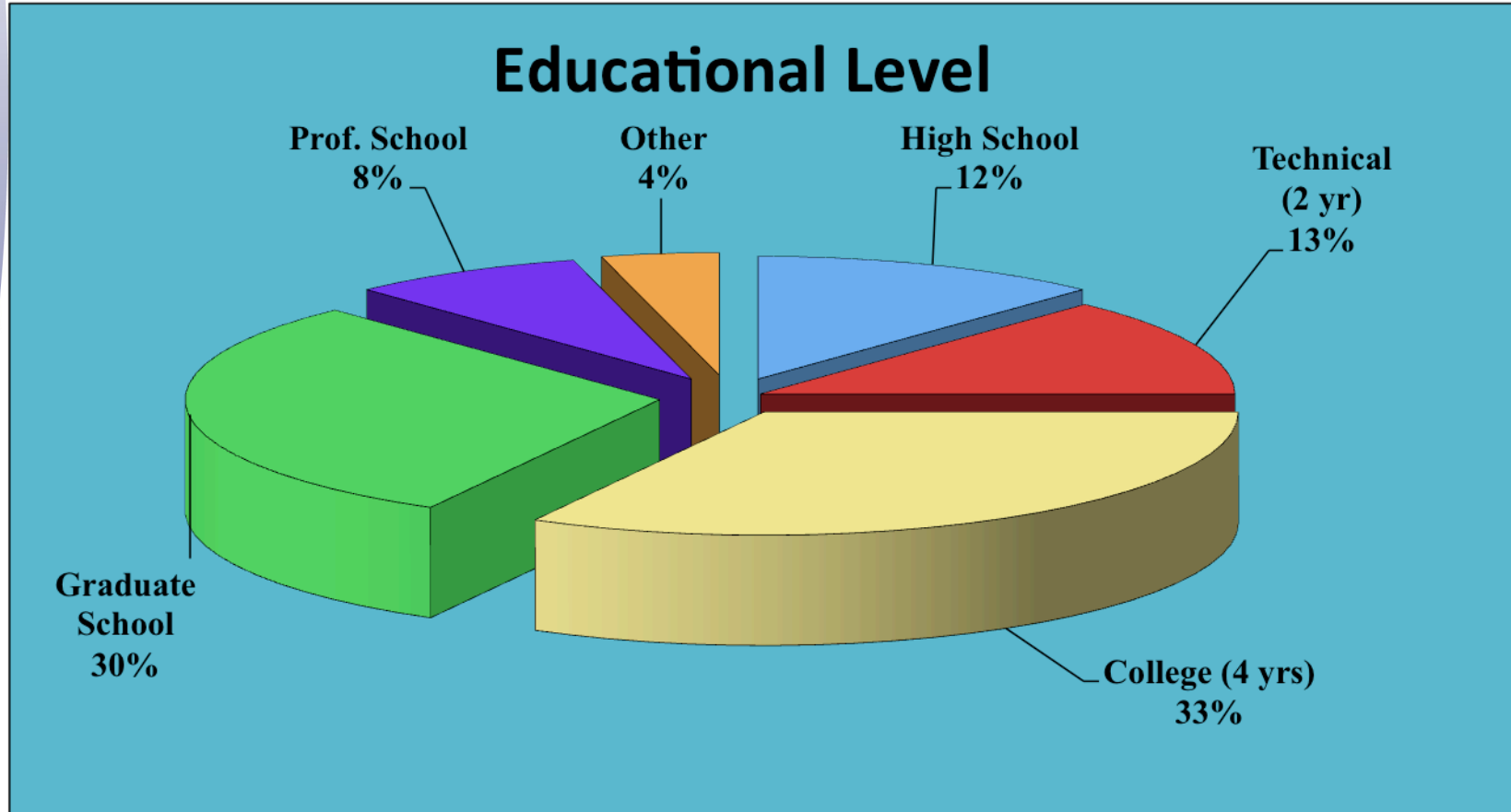
HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

# About San Diego County Farmers:



**University of California**  
Agriculture and Natural Resources

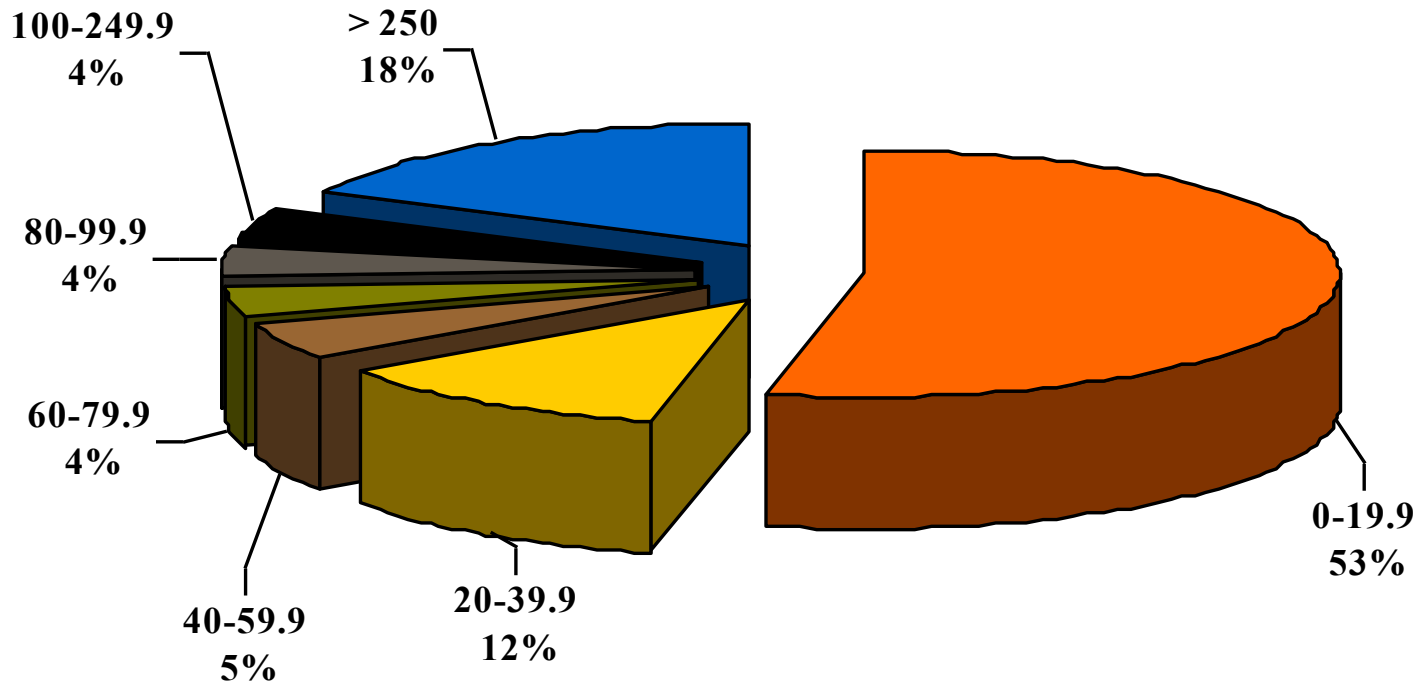
# About San Diego County Farmers:



University of California  
Agriculture and Natural Resources

# 82 % of Farms are Small

(Gross Sales per Farm Operation in US \$ 1000s)



**University of California**  
Agriculture and Natural Resources



# Large Number of Organic Farms

San Diego has the highest concentration of organic farms of all counties in the state.

<u>Top 10 Organic Crops</u>	<u>Acres</u>
1. Avocados	2,551
2. Oranges	1,277
3. Lemons	967
4. Grapefruit	499
5. Tangelos/ Tangerines	183
6. Chard	136
7. Cucumbers	69
8. Blueberries	63
9. Beans, Fresh Market	58
10. Persimmons	43

## Organic Farming



Blueberries



Lemons



Beans, fresh market

San Diego is at the forefront of organic farming with 347 registered organic producers. In 2011, San Diego organic growers produced over 150 different crops, from squash and tomatoes to jujube. The USDA's National Organic Standards Board defines "organic agriculture" as an ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain, and enhance ecological harmony.

**University of California**  
Agriculture and Natural Resources

# The Facts:

## Nursery and Cut Flower Crops

Crop	Year	Acres	Total
Bedding Plants, Color	2011	930	\$213,900,000
	2010	937	\$214,941,018
Bulbs, Corms, Rhizomes, Roots, Tubers	2011	41.5	\$346,525
	2010	58	\$5,842,456
Cacti & Succulents	2011	282	\$25,333,188
	2010	280	\$25,153,520



### Top 10 Organic Crops

	Acres
1. Avocados	2,551
2. Oranges	1,277
3. Lemons	967
4. Grapefruit	499
5. Tangelos/ Tangerines	183
6. Chard	136
7. Cucumbers	69
8. Blueberries	63
9. Beans, Fresh Market	58
10. Persimmons	43

## Organic Farming



Blueberries



Lemons



Beans, fresh market

San Diego is at the forefront of organic farming with 347 registered organic producers. In 2011, San Diego organic growers produced over 150 different crops, from squash and tomatoes to jujube. The USDA's National Organic Standards Board defines "organic agriculture" as an ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain, and enhance ecological harmony.

**University of California**  
Agriculture and Natural Resources

Adapted from San Diego County Agricultural  
Commissioner's 2010 County Crop Report

# Keys for Success?

- ◆ Creative marketing and market driven crop or enterprise selection
- ◆ Produce water efficient, niche or high profit margin crops
- ◆ Develop identity & increase demand for local agricultural products
- ◆ Capitalize on San Diego's popularity as tourist destination
- ◆ Coordination, collaboration & public education
- ◆ Improve planning and management skills!

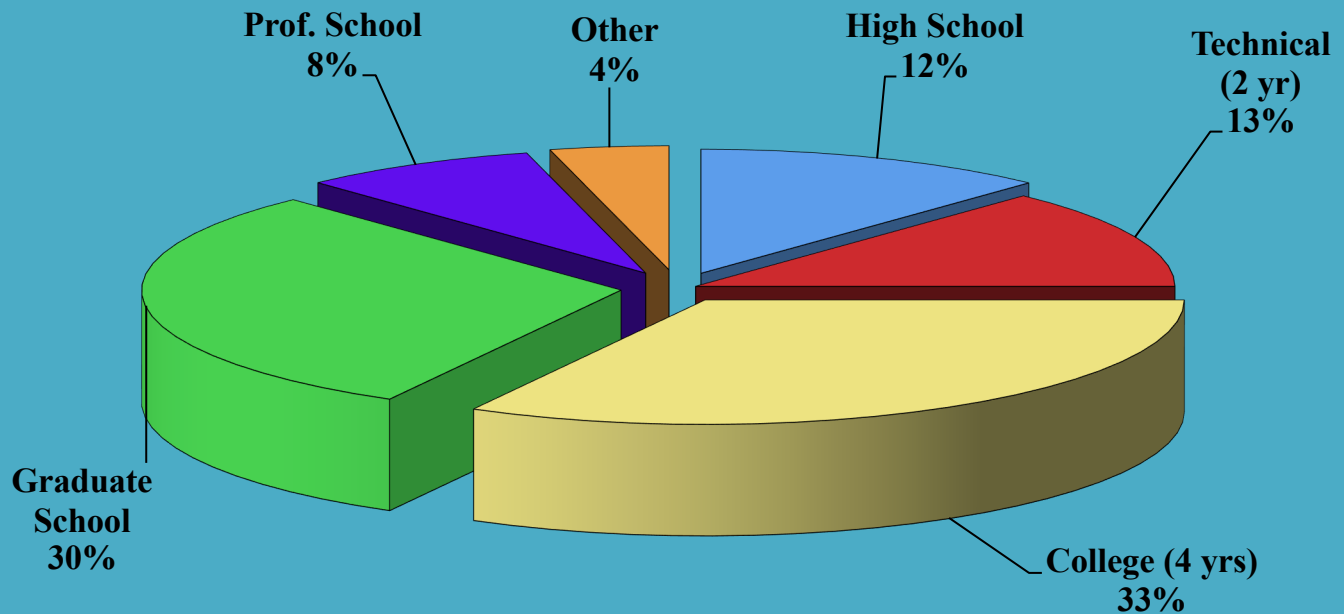
**University of California**  
Agriculture and Natural Resources

# About San Diego County Farmers:

## Ethnic Breakdown

## Age Distribution

## Educational Level



Un  
Agriculture and Natural Resources