

AGRICULTURAL COMMISSIONER SEALER OF WEIGHTS & MEASURES

Carlos Ortiz

Agricultural Commissioner/Sealer





2016

Imperial County
Agricultural Crop & Livestock Report



2016 CA Agricultural Statistics

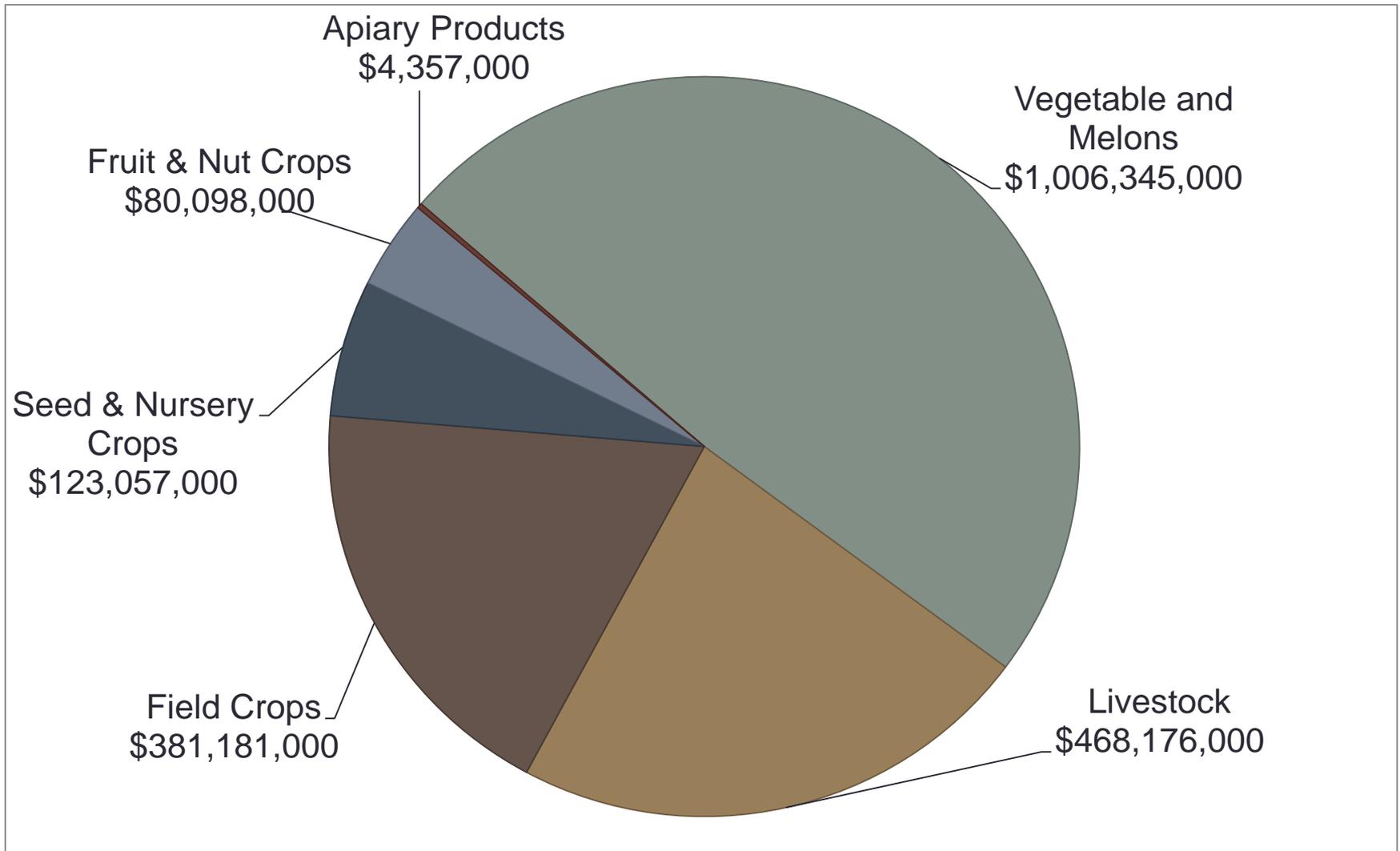
Imperial County:

- Ranked #9 out of 58 California Counties with a gross value of ag production of \$2,063,215,000
- Sole producer of sugar beets in the state
- #1 producer of alfalfa hay, onion, wheat, corn, alfalfa seed and Sudan grass hay
- Among the top 5 producer of cattle, lettuce, broccoli, celery, cilantro, carrots, cauliflower, spinach, cantaloupes, salad greens, cabbage, watermelon, grapefruit, sheep, honeydew melon and dates.



2016 Gross Value

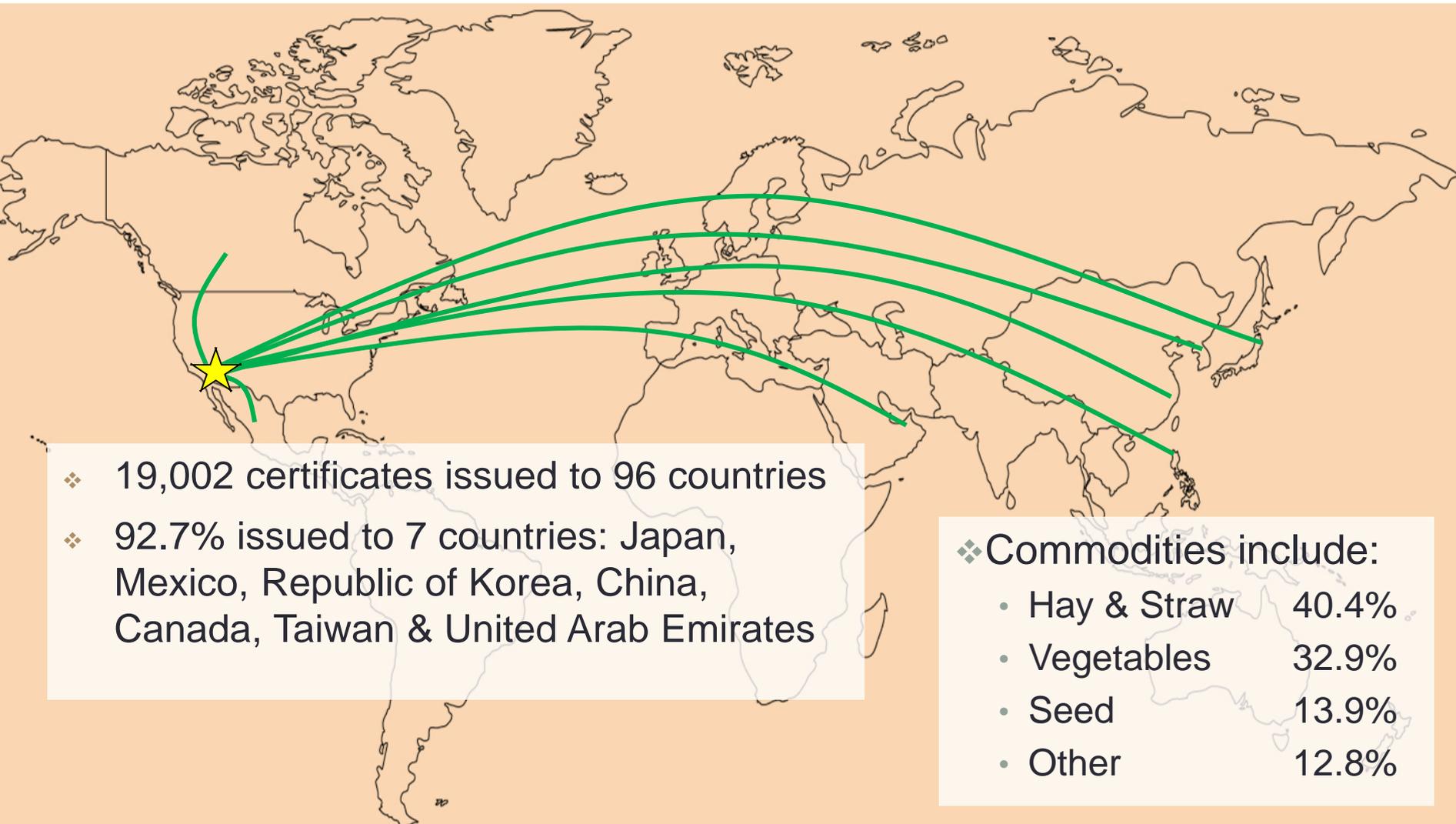
\$2,063,214,000



Top Ten Commodities

Rank 2016		Gross Value 2016	Rank 2015
1	Cattle	\$400,614,000	1
2	Alfalfa	\$148,915,000	2
3	Leaf Lettuce	\$133,212,000	5
4	Onions	\$128,476,000	3
5	Broccoli	\$120,562,000	6
6	Head Lettuce	\$119,236,000	4
7	Spinach	\$96,508,000	14
8	Alfalfa Seed	\$84,911,000	7
9	Romaine Lettuce	\$70,196,000	16
10	Carrots	\$62,038,000	10

Export: Federal Certificates

- 
- A world map with a light orange background. A yellow star is located in the western United States. Several green curved arrows originate from this star and point to various countries across the globe, including Mexico, Canada, Japan, China, and the United Arab Emirates. The map shows the outlines of continents and countries.
- ❖ 19,002 certificates issued to 96 countries
 - ❖ 92.7% issued to 7 countries: Japan, Mexico, Republic of Korea, China, Canada, Taiwan & United Arab Emirates

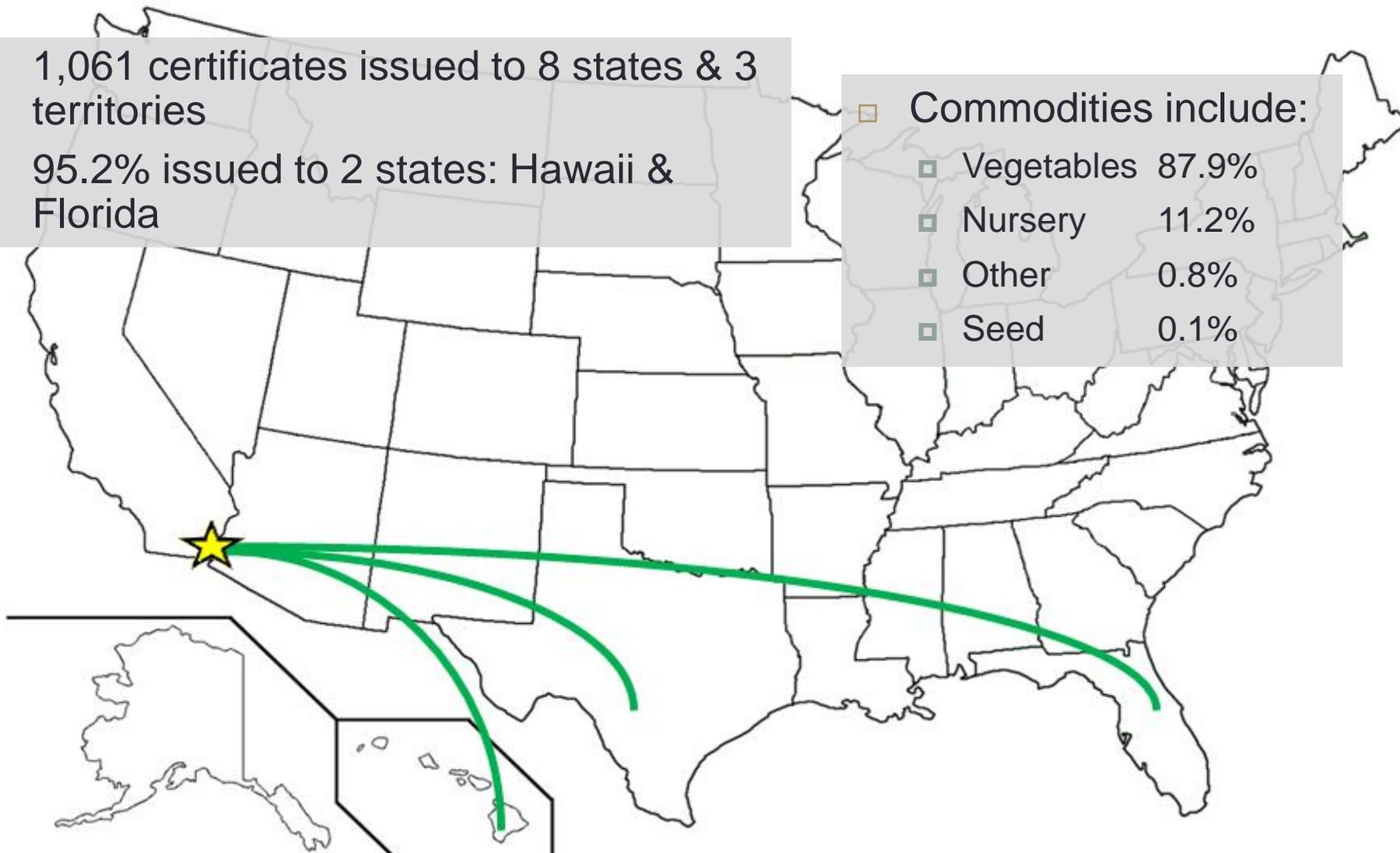
- ❖ Commodities include:
 - Hay & Straw 40.4%
 - Vegetables 32.9%
 - Seed 13.9%
 - Other 12.8%

Export: State Certificates

- 1,061 certificates issued to 8 states & 3 territories
- 95.2% issued to 2 states: Hawaii & Florida

Commodities include:

- Vegetables 87.9%
- Nursery 11.2%
- Other 0.8%
- Seed 0.1%





Economic Contributions of Imperial County Agriculture

**Dr. Jeff Langholz &
Dr. Fernando DePaolis**

*El Centro, CA.,
January 9, 2018*



Agenda

#1. Rationale

#2. Methods

#3. Findings



Why do this study?

OLD QUESTION: *“What’s the \$\$\$ value of agricultural production?”*

NEW QUESTION: *“What’s agriculture’s role in sustaining a healthy local economy?”*

new tools for an old mandate

Section 2279 of the *California Food and Agriculture Code* requires every county to report the “**value**” of agriculture



✓ Production (\$)



✓ Production (\$)

✓ Processing (\$)

✓ Multiplier Effects (\$)

✓ Employment

Crop Report *PLUS*



IMPERIAL is the 12th county to report the agriculture's fuller "value"

Contra Costa ♦ *Inyo* ♦ *Mono* ♦ *Monterey*
♦ *Riverside* ♦ *San Diego* ♦ *San Luis*
Obispo ♦ *San Mateo* ♦ *Santa Cruz* ♦
Santa Barbara ♦ *Solano*

Agenda

#1. Rationale

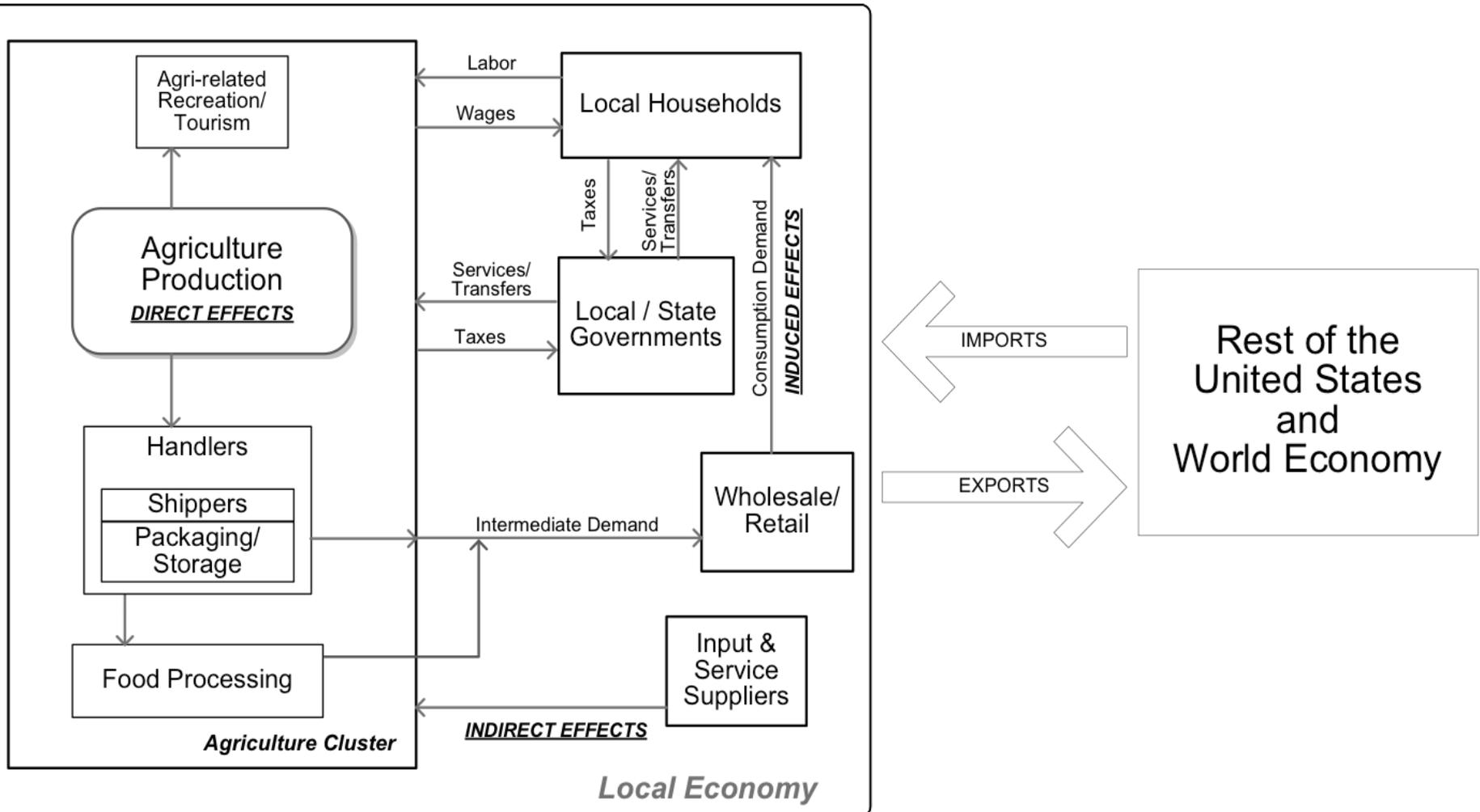
#2. Methods

#3. Findings



The “local economy” is a complex machine...

What economists see:



What the public sees....



two kinds of “Multiplier Effects”

INDIRECT:

local “*business to business*” spending by Ag companies

Examples: vehicles, fuel, seeds, fertilizer, veterinary fees, insurance, banking services, chemicals, contract work, etc.

INDUCED:

local “*consumer spending*” by Ag employees

Examples: groceries, health care, housing, utilities, transportation, medical care, recreation, etc.

Agenda

#1. Rationale

#2. Methods

#3. Findings



HIGHLIGHTS: Imperial County Agriculture . . .

. . . contributed a total of **\$4.50 billion** to the local economy, including:

- \$2.94 billion in direct economic output, or **25.9%** of the county's total direct economic output.
- \$1.56 billion in additional economic output in the form of expenditures by agriculture companies and their employees.



HIGHLIGHTS: Imperial County Agriculture . .



- . . . provided **24,429** jobs in Imperial County, including:
- **12,916** direct employees, which is **16.5%** of all jobs in the county, or nearly one out of every six workers.
 - **11,513** additional jobs made possible through expenditures by agriculture companies and their employees.

FIGURE 4: Overall Economic Effect of Imperial County Agriculture

TYPE OF EFFECT	DIRECT	INDIRECT	INDUCED	TOTAL
FARM PRODUCTION Sector				
Output Effect (\$ Millions)	\$2,381.4	\$762.9	\$428.5	\$3,572.8
Employment Effect (# Jobs)	12,186	6,549	3,421	22,156
LOCALLY SOURCED, VALUE-ADDED PROCESSING SECTOR				
Output Effect (\$ Millions)	\$555.7	\$328.3	\$41.4	\$925.4
Employment Effect (# Jobs)	730	1,213	330	2,273
TOTAL VALUE OF AGRICULTURAL SECTOR				
Output Effect (\$ Millions)	\$2,937.2	\$1,091.1	\$469.9	\$4,498.2
Employment Effect (# Jobs)	12,916	7,762	3,751	24,429

The Value of “Economic Diversity”

- ✓ **Why** is diversity important?
- ✓ **How** do we measure it?
- ✓ **What** did we find?



Economic diversity is like an “insurance policy” against economic shocks:



- ✓ Price drops
- ✓ Disease outbreaks
- ✓ New regulations
- ✓ New competitors
- ✓ Price spikes for key inputs

Shannon-Weaver Index:

$$SW_t^k = - \sum_{n=1}^k p_n * \ln (p_n)$$



The **most widely used tool** among economists, ecologists, and others



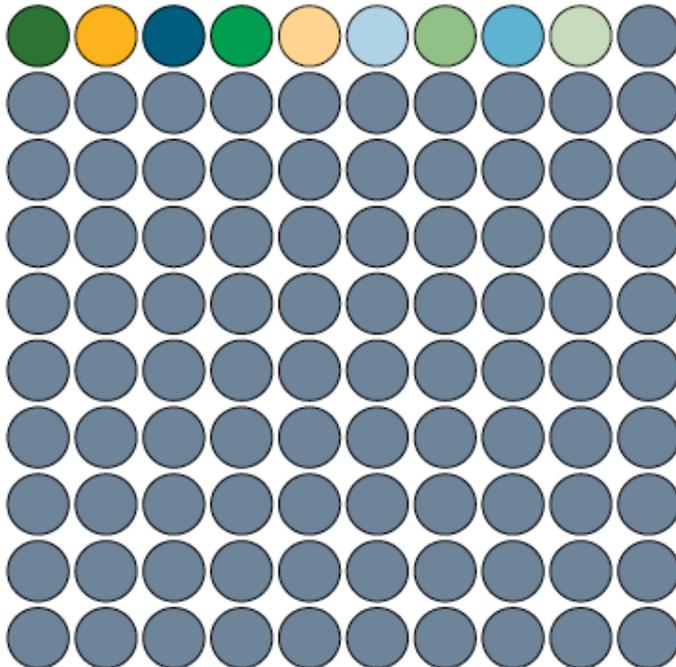
Captures the **# of different crops** as well as “**evenness**” of their distribution

POP QUIZ!

Imagine 2 counties with the same annual production value & number of crops. Which is more “diverse”?

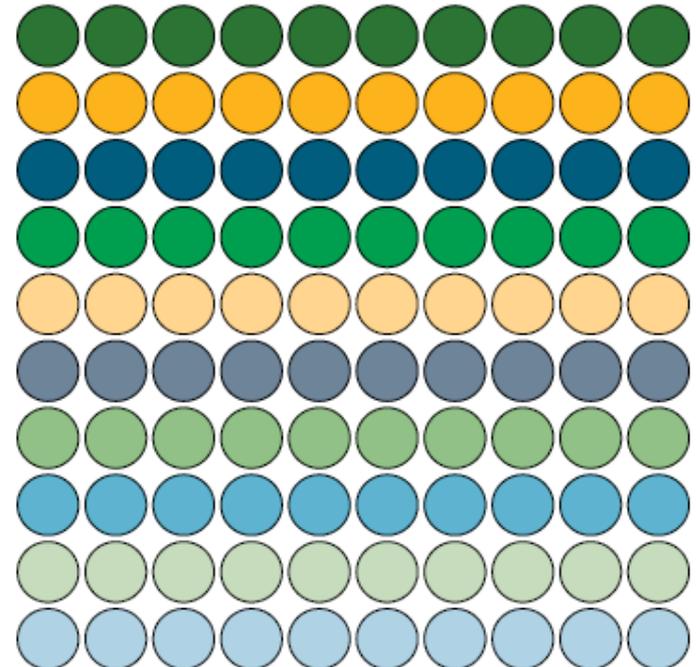
County “A”

10 Crops, \$100 million



County “B”

10 Crops, \$100 million



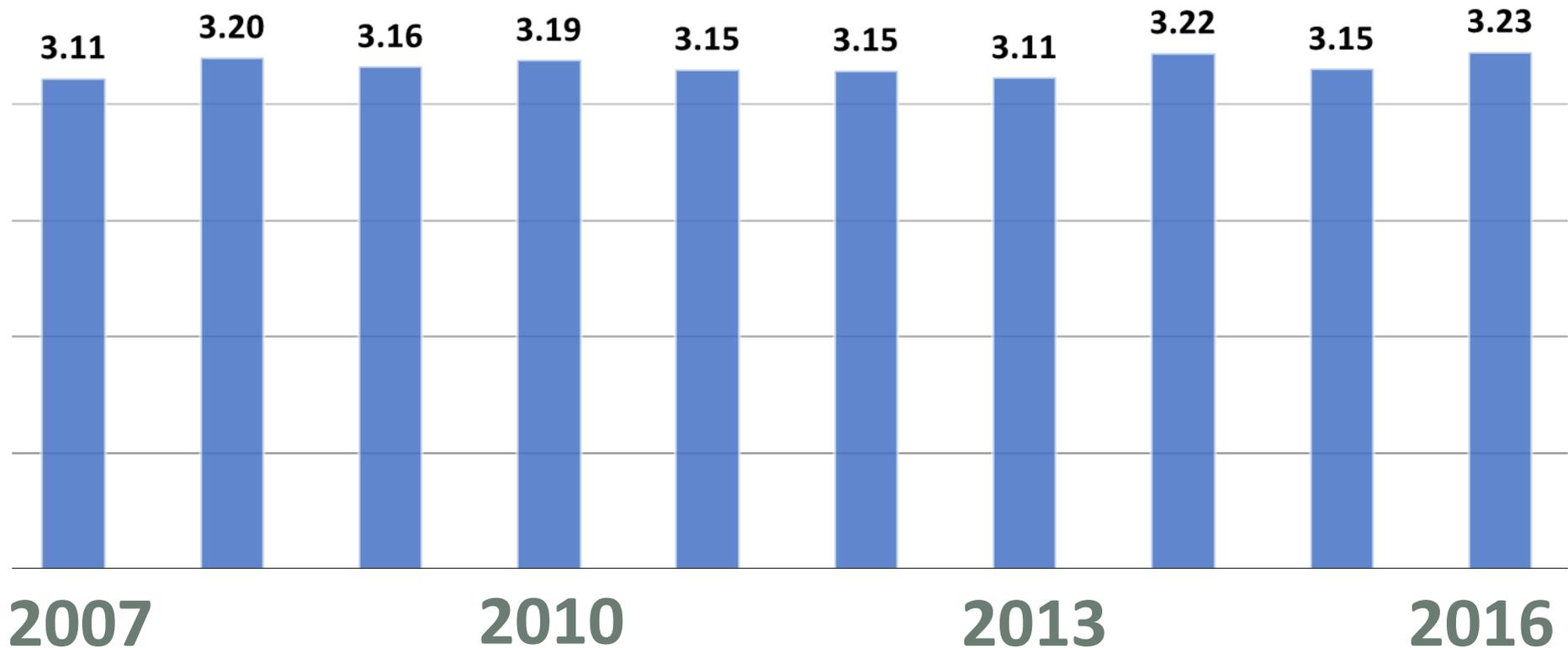
HIGHLIGHTS: Imperial County Agriculture...



...has exceptional **diversity** that provides critical **economic stability** within agriculture and to the wider county economy
(Diversity Index of 3.23)



Diversity held steady over the past decade (unlike many other CA counties)



Summary

#1. Rationale

#2. Methods

#3. Findings



How Does Agriculture Compare to other Imperial County Industries, in terms of OUTPUT and EMPLOYMENT?

DIRECT ECONOMIC OUTPUT

DESCRIPTION	OUTPUT	Rank
Agriculture (production + processing)	\$2,937,320,909	1
Government (fed/state/local)	\$2,677,816,271	2
Real Estate	\$849,698,725	3
Retail Trade	\$751,271,528	4
Wholesale Trade	\$507,660,858	5
Health & Social Services	\$476,106,931	6
Transportation & Warehousing	\$420,885,725	7
Manufacturing	\$411,108,030	8
Accommodation & Food Services	\$339,409,435	9
Construction	\$335,116,991	10
Finance & Insurance	\$317,291,375	11
Utilities	\$273,937,595	12
Professional: Scientific & Tech. Services	\$258,800,886	13
Other Services	\$222,097,898	14
Administrative & Waste Services	\$191,265,255	15
Mining	\$174,133,882	16
Information	\$139,882,269	17
Management of Companies	\$40,753,384	18
Arts, Entertainment & Recreation	\$23,244,479	19
Educational Services	\$11,983,154	20

DIRECT EMPLOYMENT

DESCRIPTION	EMPLOYMENT	Rank
Government (fed/state/local)	18,505	1
Agriculture (production + processing)	12,916	2
Health & Social Services	9,879	3
Retail Trade	8,862	4
Accommodation & Food Services	4,946	5
Administrative & Waste Services	3,322	6
Other Services	3,257	7
Transportation & Warehousing	3,095	8
Wholesale Trade	2,446	9
Construction	2,297	10
Professional: Scientific & Tech. Services	2,137	11
Real Estate	1,892	12
Finance & Insurance	1,581	13
Manufacturing	1,065	14
Mining	472	15
Arts, Entertainment & Recreation	424	16
Utilities	374	17
Educational Services	354	18
Information	318	19
Management of Companies	250	20

Thank You

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Agricultural Commissioner's Staff



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Pest Detection & Eradication Division



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John Molina, Agricultural Assistant
Heriberto Sanchez, Agricultural Biologist III
Bottom Left to right:
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Pesticide Use Enforcement Division



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**Sandra
Mendivil**

Special Projects Coordinator

Have you thanked a farmer today?



Thank You

