College of Agricultural, Consumer and Environmental Sciences

The Center of Excellence for Sustainable Food and Agricultural Systems

New Mexico State University

aces.nmsu.edu



New Mexico Agriculture Contributions & Opportunities

Jay M. Lillywhite

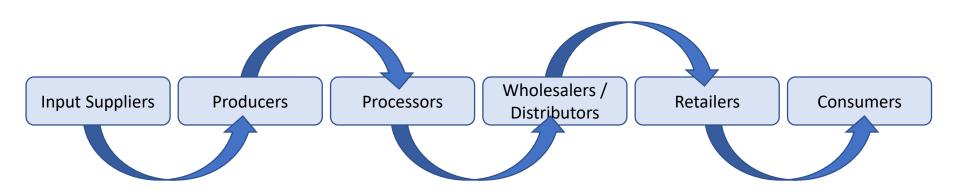
Assistant Dean, Economic & Rural Development
The Center of Excellence in Sustainable Food and Agricultural Systems
College of Agricultural, Consumer, and Environmental Sciences
New Mexico State University

Investments & Pensions Oversight Committee Santa Fe, NM August 18, 2023

Food & Fiber's Economic Contribution to New Mexico's Economy

Often when we think of agriculture, we often think only of production agriculture, but it is more...





Input Suppliers

Producers

Processors

Wholesalers / Distributors

Retailers

Consumers

- \$447.1 million output
- Jobs
 - 1,807 proprietors (\$27.8 million)
 - 4,969 employees (\$244.6 million)
 6,775 total

Input Suppliers

Producers

Processors

Wholesalers / Distributors

Retailers

Consumers

- \$3.1 billion output
- Jobs
 - 21,856 proprietors (\$897.8 million)
 - 7,177 employees (\$304.5 million)
 29,033 total

Input Suppliers

Producers

Processors

Wholesalers / Distributors

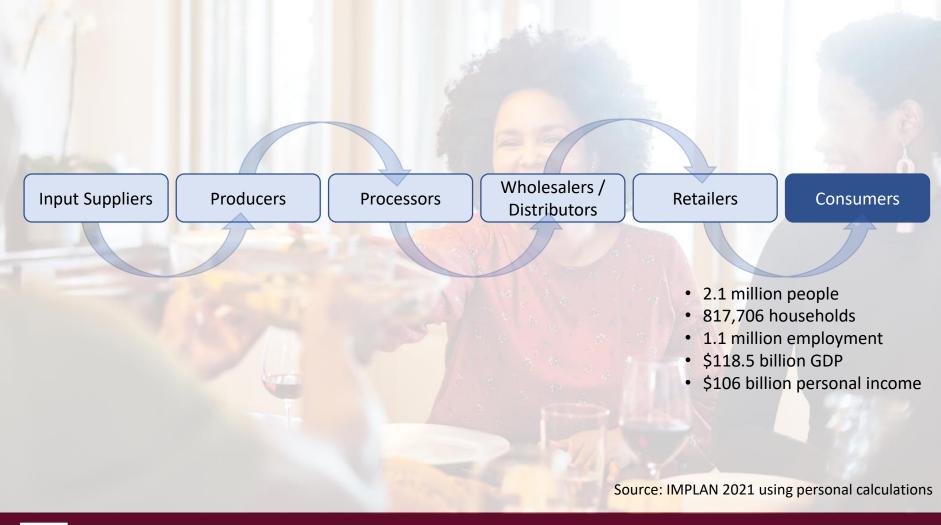
Retailers

Consumers

- \$5.1 billion output
- Jobs
 - 1,180 proprietors (\$53.2 million)
 - 9,659 employees (\$467.2 million)
 10,839 total

Wholesalers / **Input Suppliers Producers Processors** Retailers Consumers Distributors • \$738.7 million output Jobs 471 proprietors (\$9.0 million) 3,286 employees (\$212.4 million) 3,757 total

Wholesalers / **Input Suppliers Producers** Retailers Consumers **Processors Distributors** • \$9.1 billion output Jobs 6,080 proprietors (\$441.0 million) 89,898 employees (\$2.6 billion) 80% output from 95,977 total restaurants Source: IMPLAN 2021 using personal calculations



Input Suppliers Producers Processors Wholesalers / Distributors Retailers Consumers

\$18.6 billion output (9.0%)

- 2.4% input suppliers
- 16.8% producers
- 27.5% processors
- 4.2% wholesalers
- 49.1% retailers

146,381 jobs (13.6%)

- 4.6% input suppliers
- 19.8% producers
- 7.4% processors
- 2.6% wholesalers
- 65.6% retailers

New Mexico vs. the U.S.

Input Suppliers

Producers

Processors

Wholesalers / Distributors

Retailers

Consumers

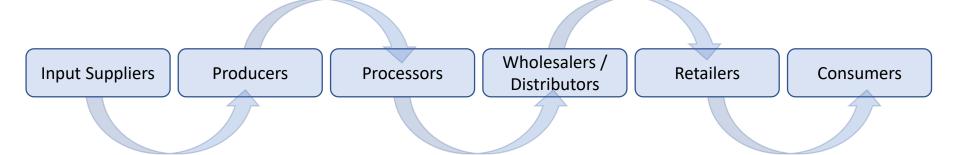
Output

	New Mexico	United States
Dollars	\$18.6 billion	\$3.6 trillion
% of Economy	9.0%	8.9%
Supply Chain %1		
Input Suppliers	2.4%	4.1%
Producers	16.8%	12.8%
Processors	27.4%	35.0%
Wholesalers	4.2%	5.6%
Retailers	49.1%	42.5%

¹ Numbers may not add to 100% due to rounding

Jobs

	New Mexico	United States
Jobs	146,381	195.7 million
% of Economy	13.6%	12.3%
Supply Chain %1		
Input Suppliers	4.6%	4.9%
Producers	19.8%	10.8%
Processors	7.6%	11.3%
Wholesalers	2.6%	3.4%
Retailers	65.6%	69.6%

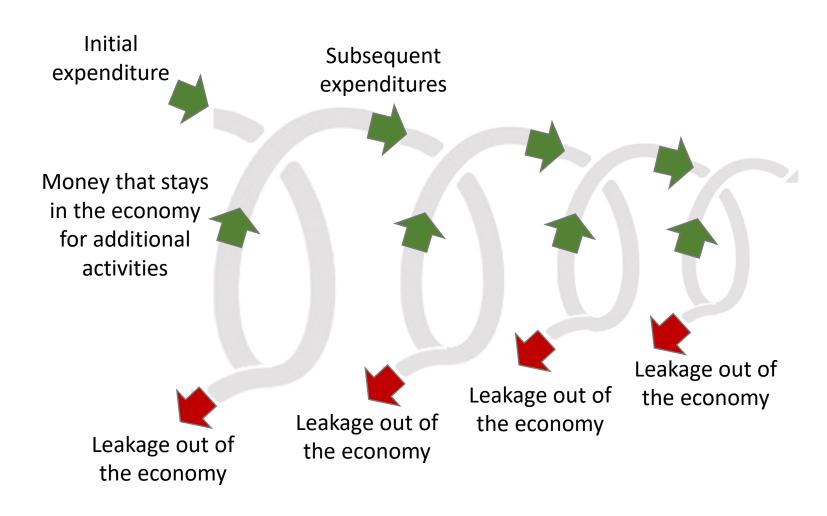


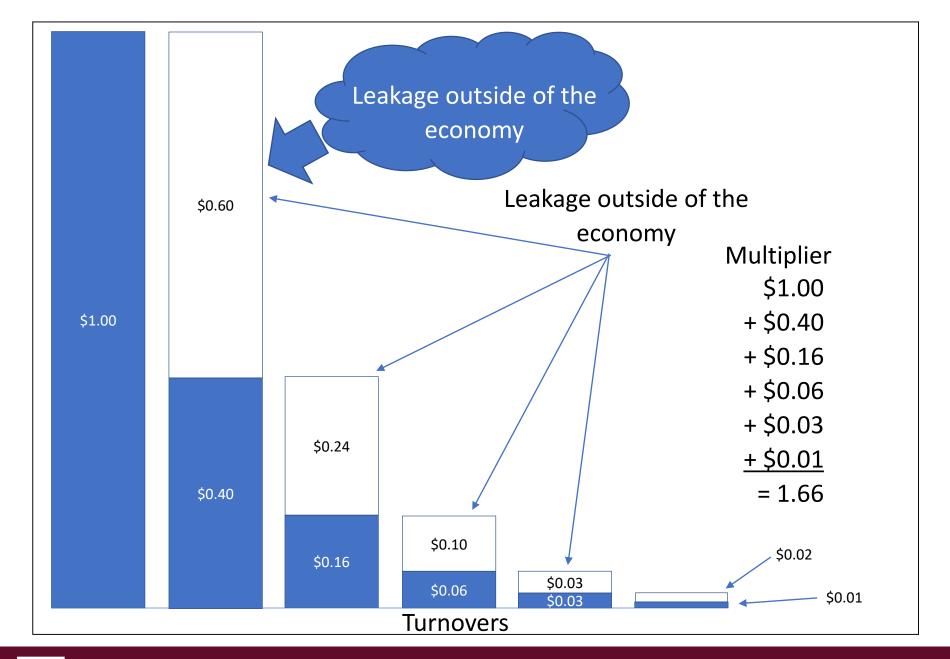
\$18.6 billion output 146,381 jobs



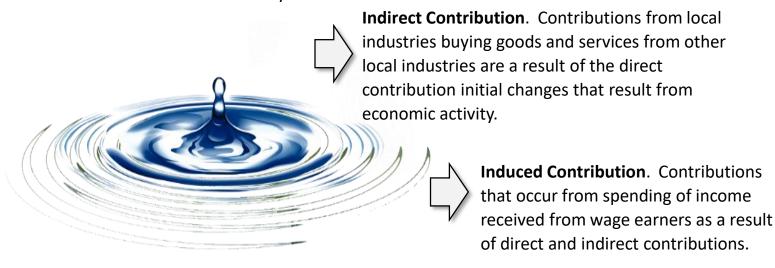
These numbers do not include output and employment from other segments of the economy that provide products and services to supply chain participants.

Money within the economy





Direct Contribution. Initial changes that result from economic activity.



When we account for these "ripple" contributions, the direct contributions have a multiplicative impact on the economy.



Output multiplier = 2.18

Employment multiplier = 1.82







\$4.1 billion in business taxes



\$275.0 million exports

Source: FeedingtheEconomy

Investing in Food & Fiber

Market Returns

The S&P 500 is broken into 11 sectors. These include:

- Consumer discretionary index
- Consumer staples index
- Energy index
- Financials index
- Healthcare index
- Industrials index
- Information technology index
- Materials index
- Real estate index
- Communication services index
- Utilities index

Market Sectors

The S&P 500 is broken into 11 sectors. These include:

- Consumer discretionary index
- Consumer staples index
- Energy index
- Financials index
- Healthcare index
- Industrials index
- Information technology index
- Materials index
- Real estate index
- Communication services index
- Utilities index



Restaurants

- Chipotle Mexican Grill
- Domino's Pizza Inc
- Darden Restaurants
- McDonald's Corp
- Starbucks Corp
- · Yum! Brands

Other (related)

- Advanced Auto Parts
- Amazon.com Inc
- Autozone
- Best Buy Company
- Carnival Corp
- · Caesars Entertainment Inc
- Ebay Inc
- Expedia Group Inc
- Ford Motor Company
- General Motors Company
- Garmin Ltd
- Lowe's Companies
- Nike Inc
- Tractor Supply Company

Market Sectors

The S&P 500 is broken into 11 sectors. These include:

- Consumer discretionary index
- Consumer staples index
- Energy index
- Financials index
- Healthcare index
- Industrials index
- Information technology index
- Materials index
- Real estate index
- Communication services index
- Utilities index



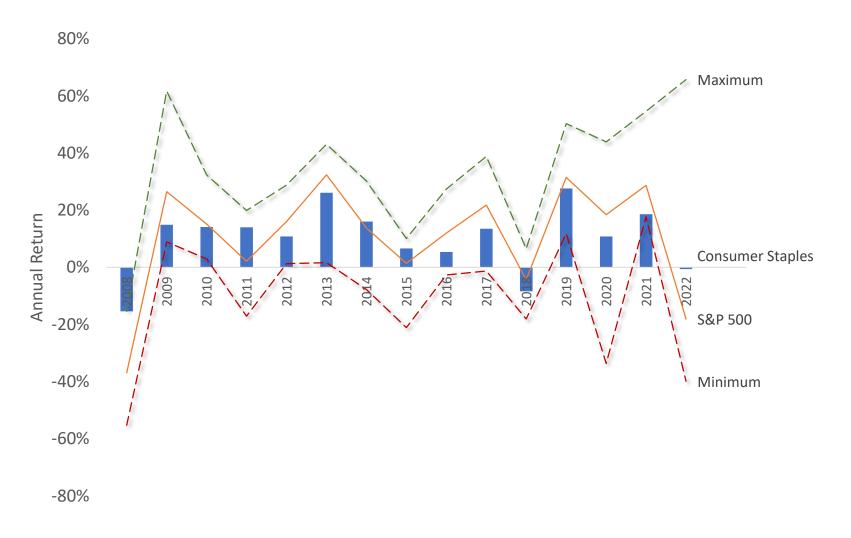
Food processors

- Archer Daniels Midland
- Bunge Ltd
- Conagra Brands Inc
- Campbell Soup Company
- General Mills
- Hormel Foods
- Kellogg Company
- Keurig Dr Pepper Inc
- Tyson Foods
- J.M. Smucker Company
- Monster Beverage Cp
- Pepsico

Other (related)

- Kimberly-Clark Corp
- Walmart Inc
- Target Corp
- Sysco Corp
- Procter & Gamble Company
- Kroger Company
- Estee Lauder Companies
- Dollar General Corp
- · Costco Wholesale
- Clorox Company
- Colgate-Palmolive Company

Market Returns (S&P 500 Sectors)



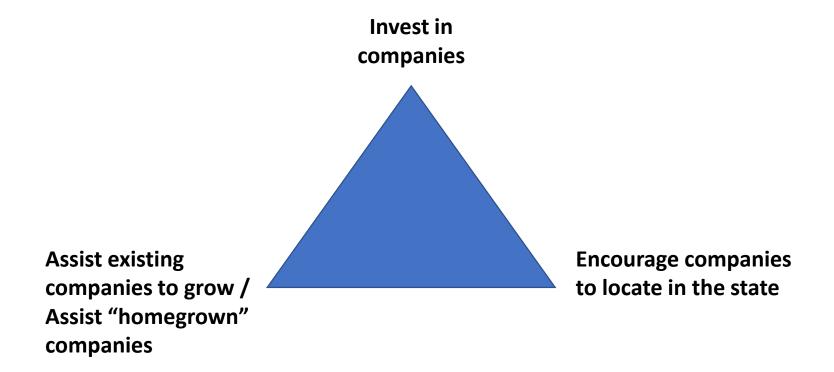
Source: novelinvestor

Sector Return Standard Deviations

Sector	Stdev
Energy	29.1%
Information Technology	28.2%
Financials	24.9%
Consumer Discretionary	23.6%
Materials	23.5%
Real Estate	23.1%
Communication Services	20.3%
Industrials	20.0%
S&P 500 Index	19.3%
Health Care	15.3%
Utilities	14.2%
Consumer Staples	11.6%

Source: novelinvestor

Investing in food (and agricultural) companies



Investing in food (and agricultural) companies

Invest in publicly traded companies

- From an investment perspective, it is easier if a company is publicly traded
- Few publicly traded companies based in New Mexico
- Depending on legalities and policies, it is possible to invest in private companies, but more difficult.

Encouraging companies to locate in the state

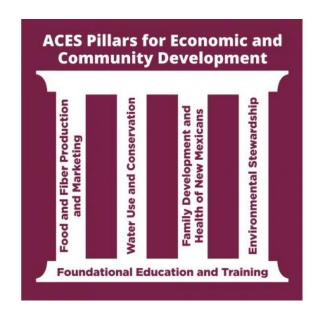
- Create a positive business environment
- Provide incentives

Assist existing companies to grow / Assist "homegrown" companies

- Technical assistance
- Workforce / management development
- Financial assistance / access to capital (State Small Business Credit Initiative)

New Mexico State University's Center of Excellence in Sustainable Food & Agricultural Systems

- One of four centers established in 2019 by the State Legislature
- Housed in the College of Agricultural, Consumer, and Environmental Sciences
- Two co-directors (Science & economics/business)
- Mission to build a vibrant, sustainable agricultural economy
 - Innovative, transdisciplinary, and collaborative research
 - Interdisciplinary education and training
- Focus on post-harvest value-added agriculture













The Center of Excellence



Jay M. Lillywhite

Assistant Dean

College of Agricultural, Consumer, and Environmental Sciences MSC 3169 New Mexico State University P.O. Box 30003 Las Cruces, NM 88003

575-646-5321 lillywhi@nmsu.edu