



Colorado Blueprint of Food and Agriculture

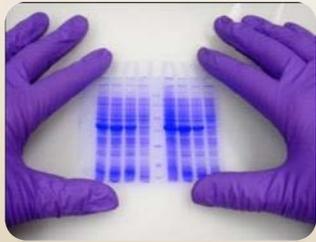
College of
AGRICULTURAL SCIENCES

The Value Chain of Colorado Agriculture



**Colorado
State**
University

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Becca Jablonski,
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Chad Christenson



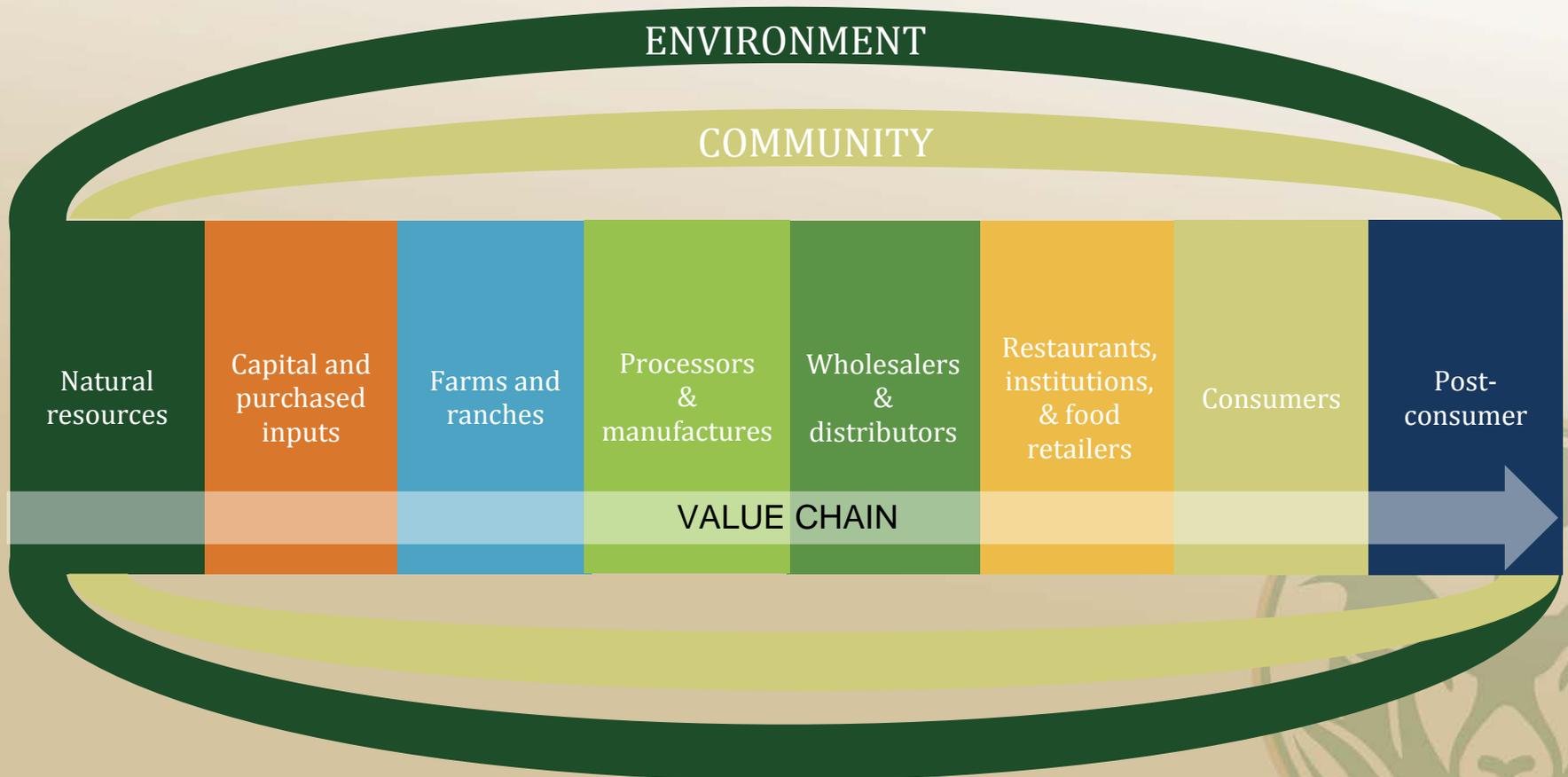
What is a Value Chain?

The series of economic steps or linkages that turn raw materials and other inputs into final products or services delivered to end users.



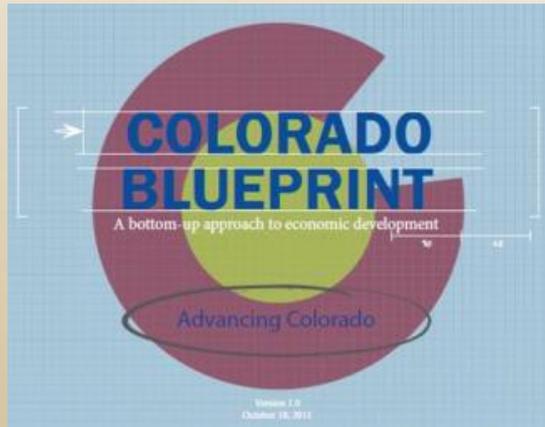


The Agricultural Value Chain



Some background

Mandate from Governor
OEDIT



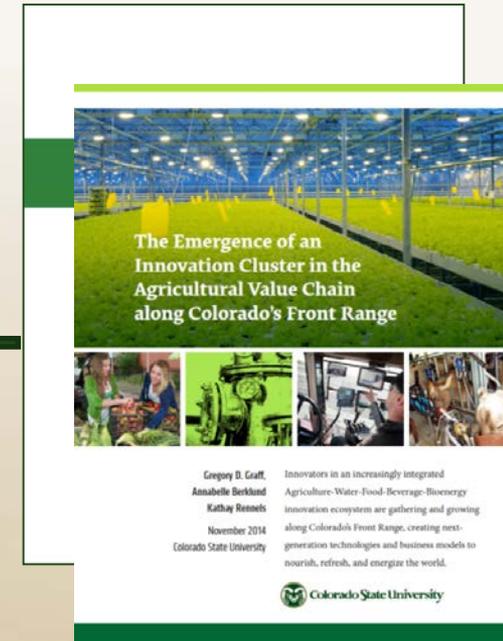
2011

Ag & Food
Key Industry Network



2011-2013

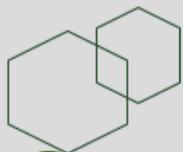
CSU, with CDA



Nov 2014

Achieved several things:

- Gave the industry focus
- Helped recognize opportunities, esp. in food manufacturing
- Put discussions of water in context
- Highlighted new nature of workforce
- Focused on ag innovation



Today, introducing...



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Adding Community Context to a Sector-Wide Conversation



COLORADO BLUEPRINT – PROJECT TEAM



Dawn Thilmany McFadden
Professor – Outreach Coordinator



Gregory Graff
Associate Professor



Becca Jablonski
Assistant Professor and Food Systems
Extension Economist



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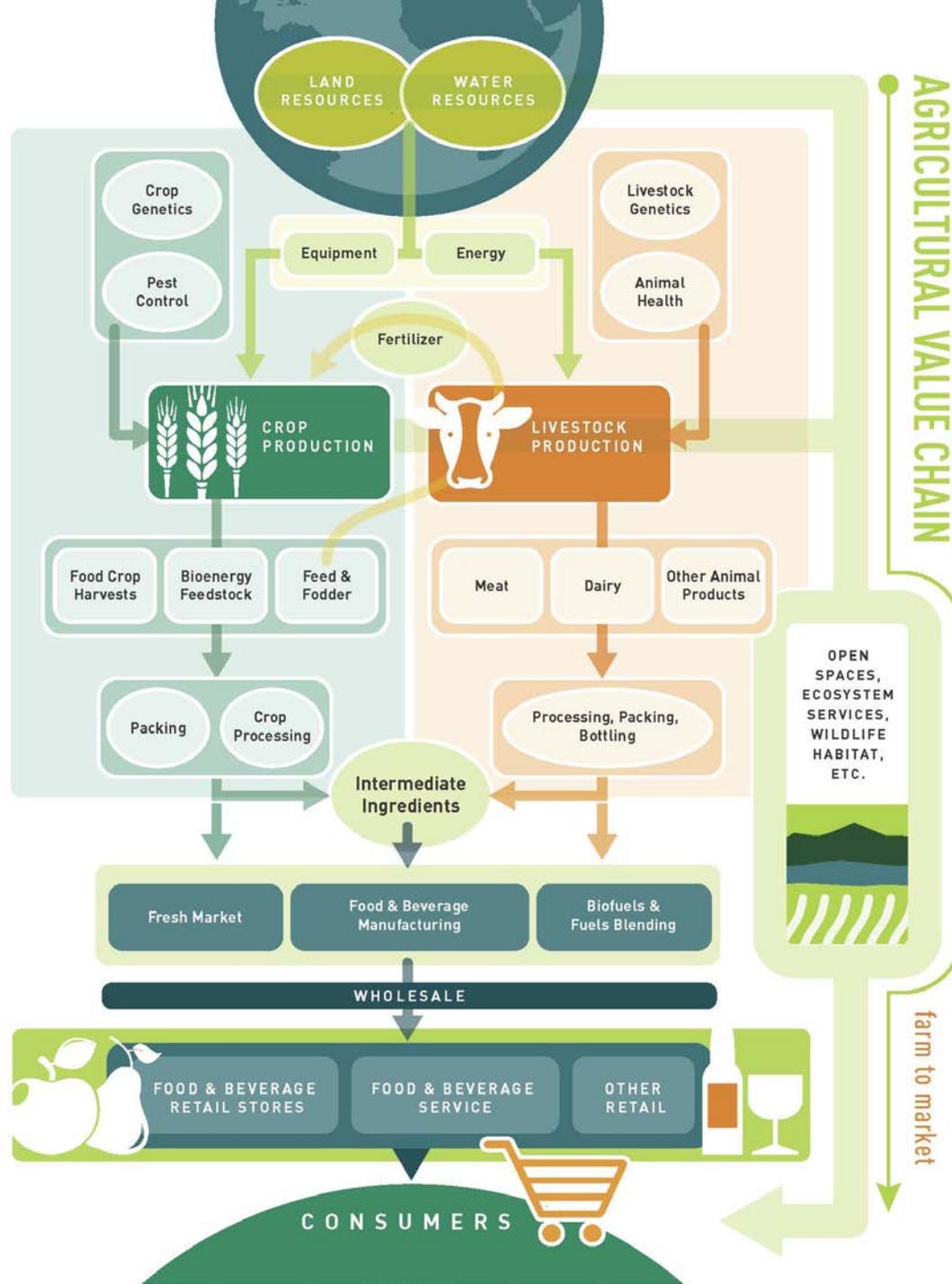
2017 update of The Value Chain of Colorado Agriculture

A comprehensive foundation of data on the size and structure of Colorado's ag and food industries, in order to:

- Identify areas where businesses share a ***common fate***
- Bring Colorado's regions together around ***shared economic strengths***
- Provide an ***integrated perspective*** to inform policy and regulatory decision making across all sectors of the value chain
- Highlight ***connections***, allow for a deeper understanding of agriculture and its impact
- Advance ***new conversations*** about Colorado agriculture.



More than 200 distinct economic activities, sub-sectors, or specific industry classes (NAICS)



Updating data from 2011 through 2015.

AND

Adding new analyses of additional ag and food related activities.



What we found:

SOME OBSERVATIONS FROM THE UPDATE OF THE VALUE CHAIN

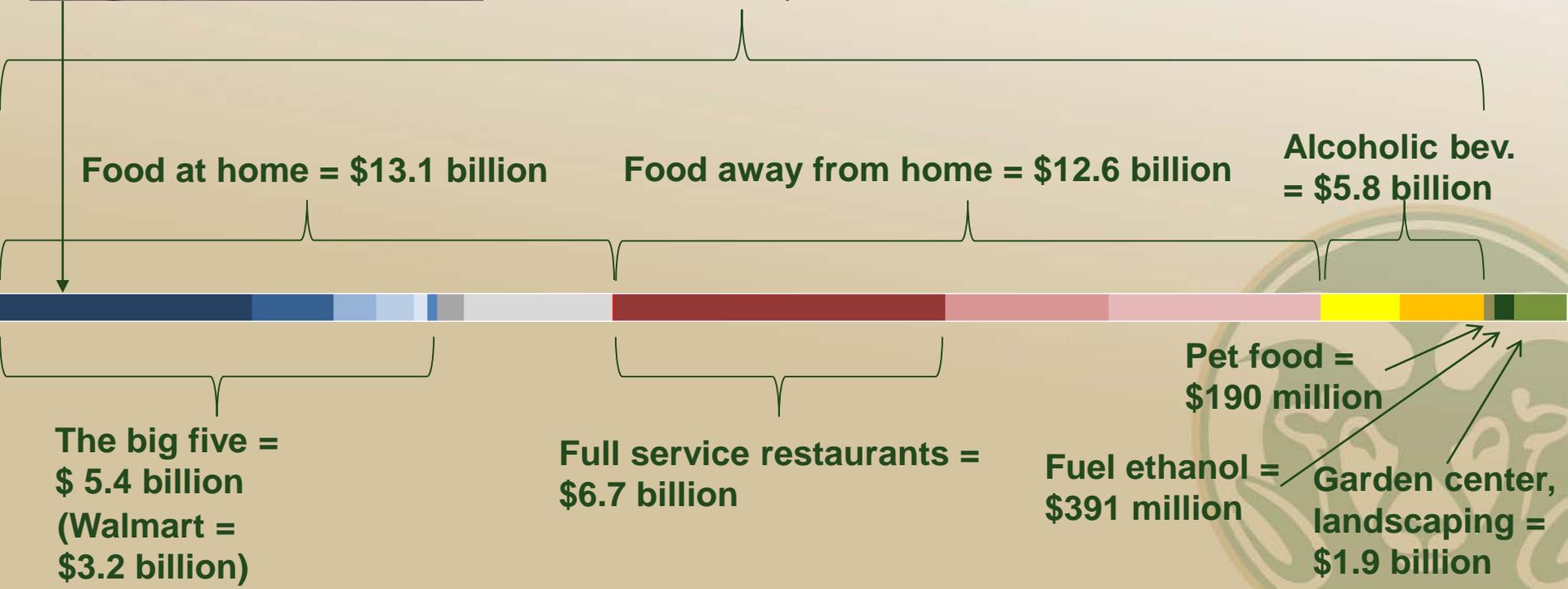




The Reality of Retail in 2015

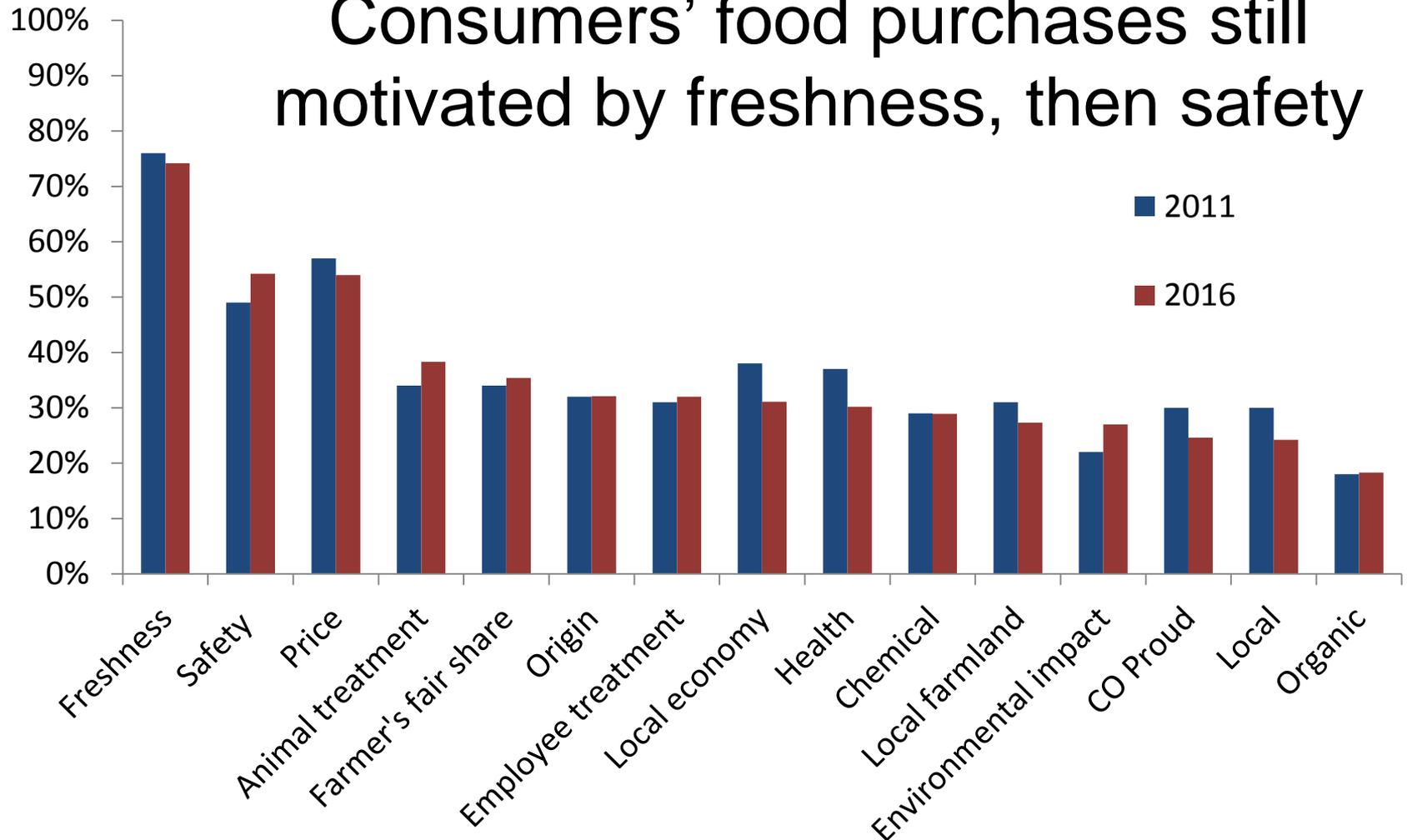
Total Ag Product Retail Sales in Colorado = \$34 billion

Total Food & Beverage Retail Sales in Colorado = \$31.5 billion





Consumers' food purchases still motivated by freshness, then safety





The Quiet Link in the Value Chain: Wholesale



Over **2,000** companies and
almost **35,000** jobs in Colorado.

Highest average earning among
major segments of the ag value chain:
\$57,000

Annual Average Job Growth
from 2010 to 2015: **4.6%**

2015 Estimated Sales =
\$3.3 billion





Feeding the World

Combined sales of Colorado's manufactured foods and beverages are estimated at **\$16.0 billion**.

Of that, an estimated **\$1.6 billion (10%)** is exported from the US, **\$ 8.3 billion (51%)** is sold out of state, **\$ 6.2 billion (38%)** is sold within CO.





A State of Beef & Beer

Value of production of beef cattle = \$2.4 billion
All animal slaughter and meat packing = **\$3.2 billion**

Beer brewing = **\$3.5 billion**





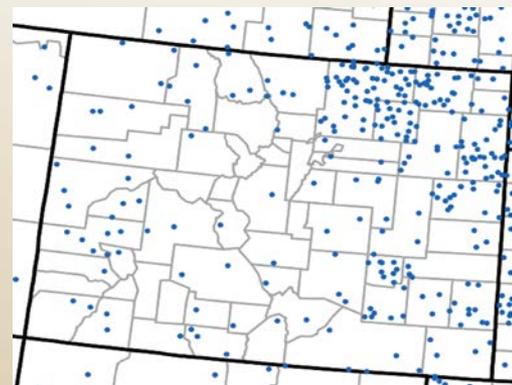
Revenues from Livestock in Colorado



Marketings of Cattle & Calves = **\$4.0 billion**

Value of production of Cattle & Calves = **\$2.5 billion**

Marketings of hogs = **\$193 million**



Cattle and calves in Colorado, 2015 (1 dot=10,000 head)



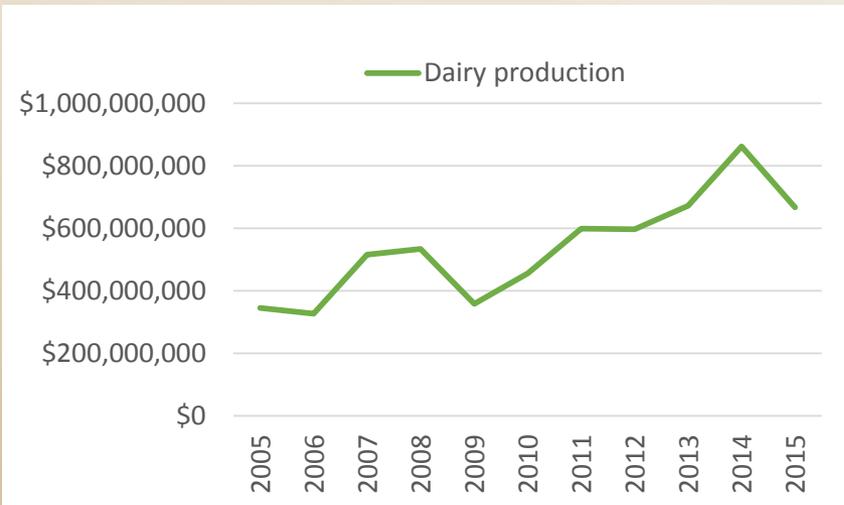


Dairy: Up & Coming

On farm milk production = **\$668 million**

Dairy manufacturing = **\$2.8 billion**
(of which, cheese = **\$2.1 billion**)

Dairy manufacturing
annual Average Sale Growth
from 2010 to 2015: **9.9%**





The Livestock Feed (Im)balance

Feed purchases are way up. Feed expenditures in 2015 are **214%** of their 2005 level.

Colorado's feed deficit was -\$400 million in 2015, but up from over -\$600 million in 2014.

Between demand for cattle feeding and for ethanol production, an estimated **100 million bushels** of grain corn need to be shipped into the state each year.



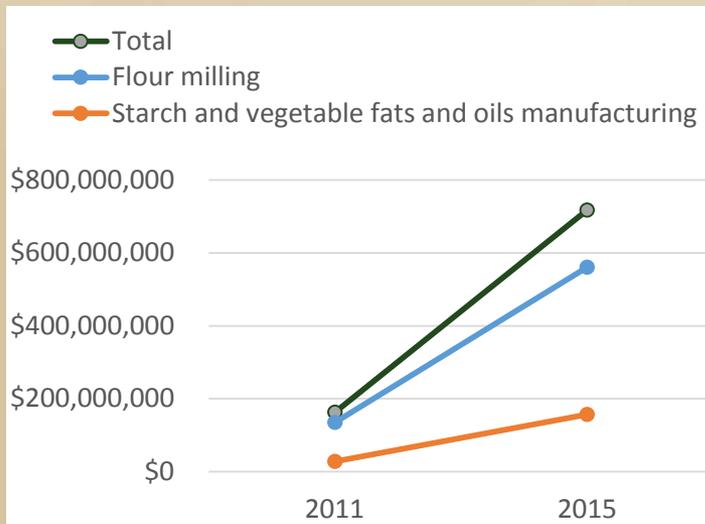
The Milling and Baking Boom

Milling = **\$717 million**

340% increase in estimated sales,
110% increase in jobs,
and 235% increase in payroll.

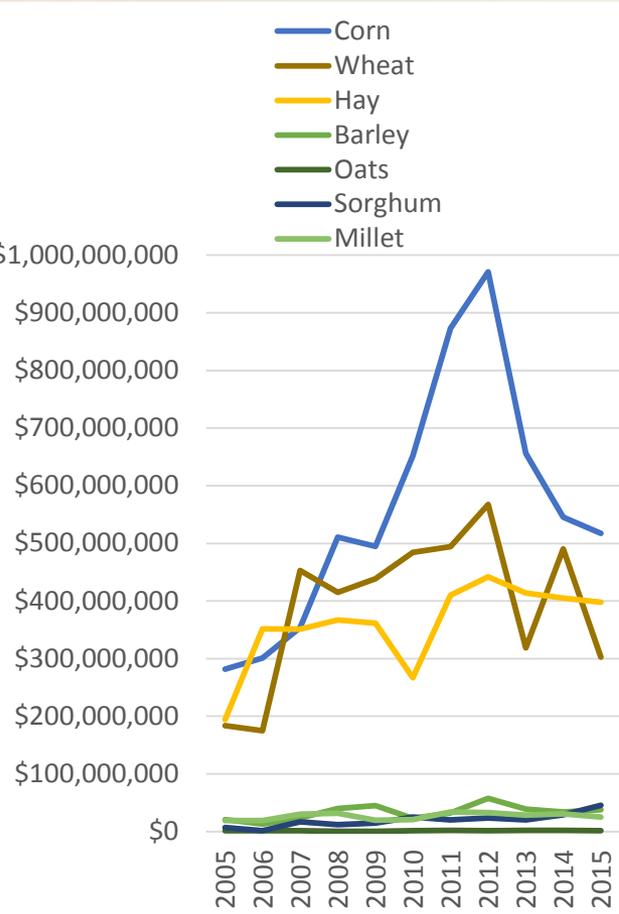
Baking = **\$1.4 billion**

25% increase in estimated sales.



Revenues from Crop Production in Colorado

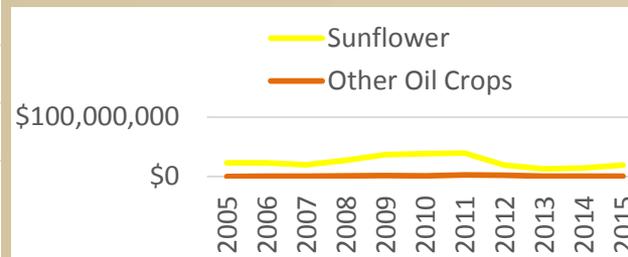
On farm production = **\$2.2 billion**



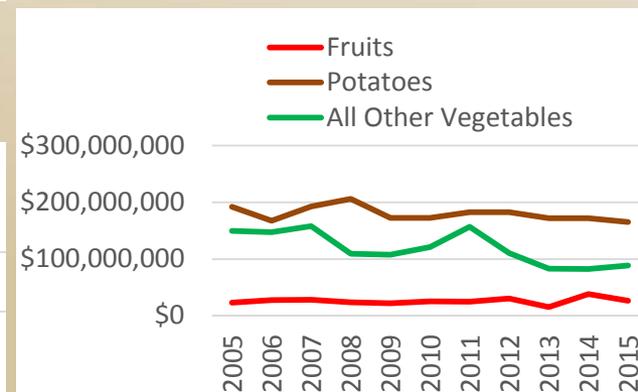
Grains and fodder



Sugar crops



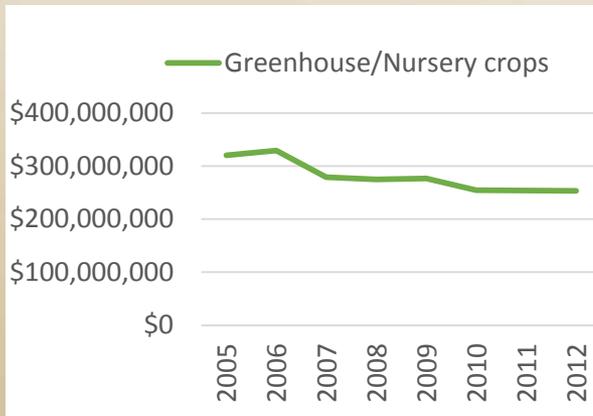
Oilseeds



Fruits and vegetables



Greenhouse & Nursery Crops: Farming the Urban Landscape



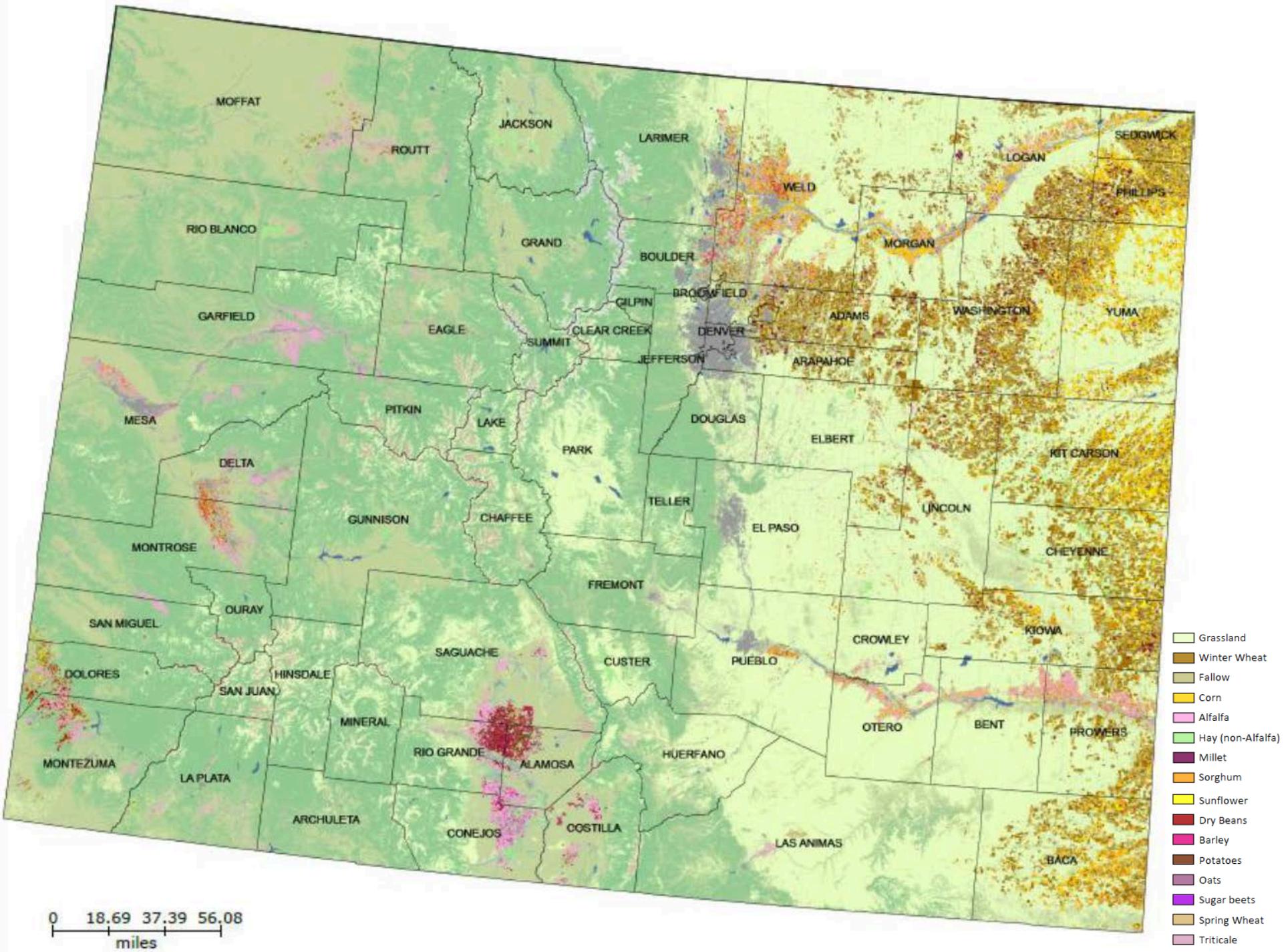
On farm production
= **\$250 million**

Retail sales of nursery, greenhouse,
and florist products
= **\$289 million**



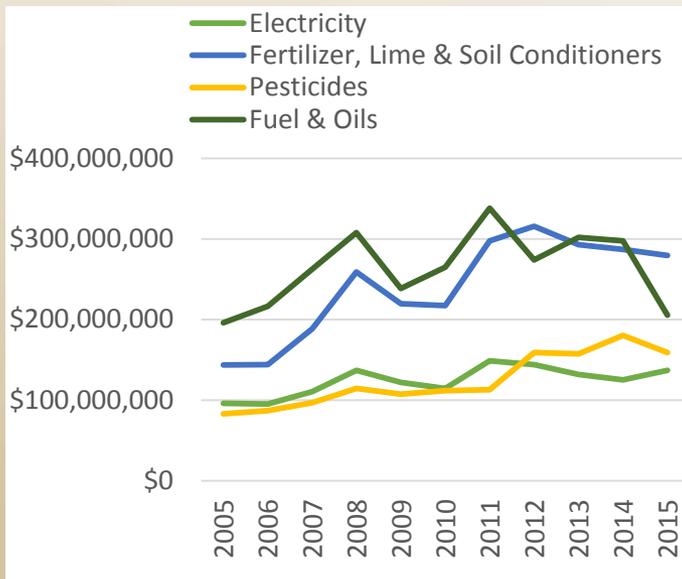
Landscaping services
= **\$1.5 billion**







Input Costs of Farming



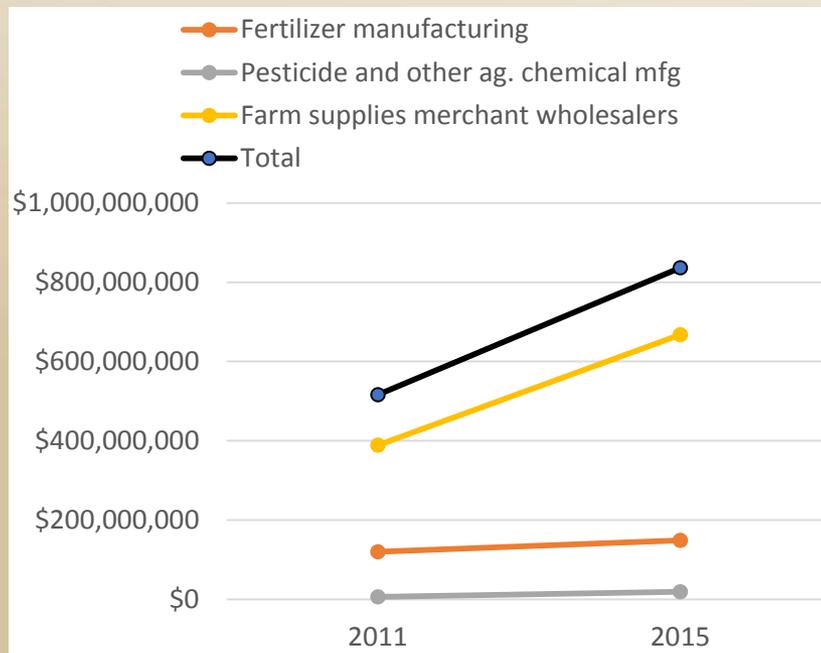
Fertilizer and pesticide expenses for farms and ranches have **increased 93 percent** over the last decade.

Fuel prices have come back down after peaking in 2008 and 2011.



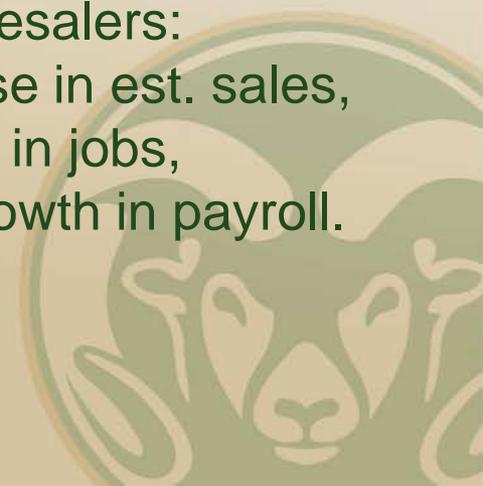


Colorado Ag Inputs Industry



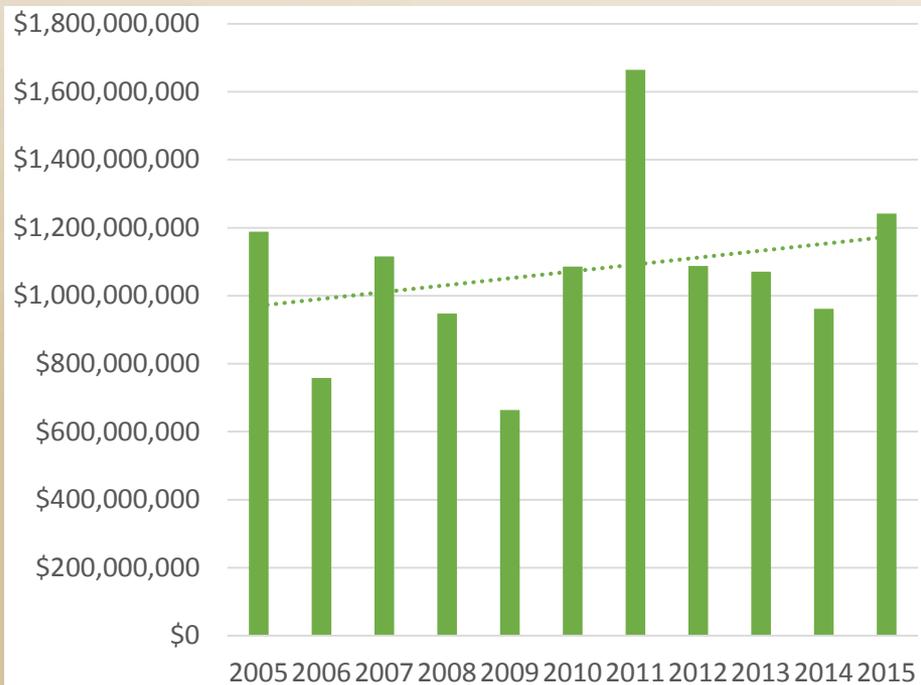
Combined manufacturing and wholesale of farm supplies: over **\$800 million**

Strongest growth in farm supply wholesalers: 72% increase in est. sales, 32% growth in jobs, and 79% growth in payroll.



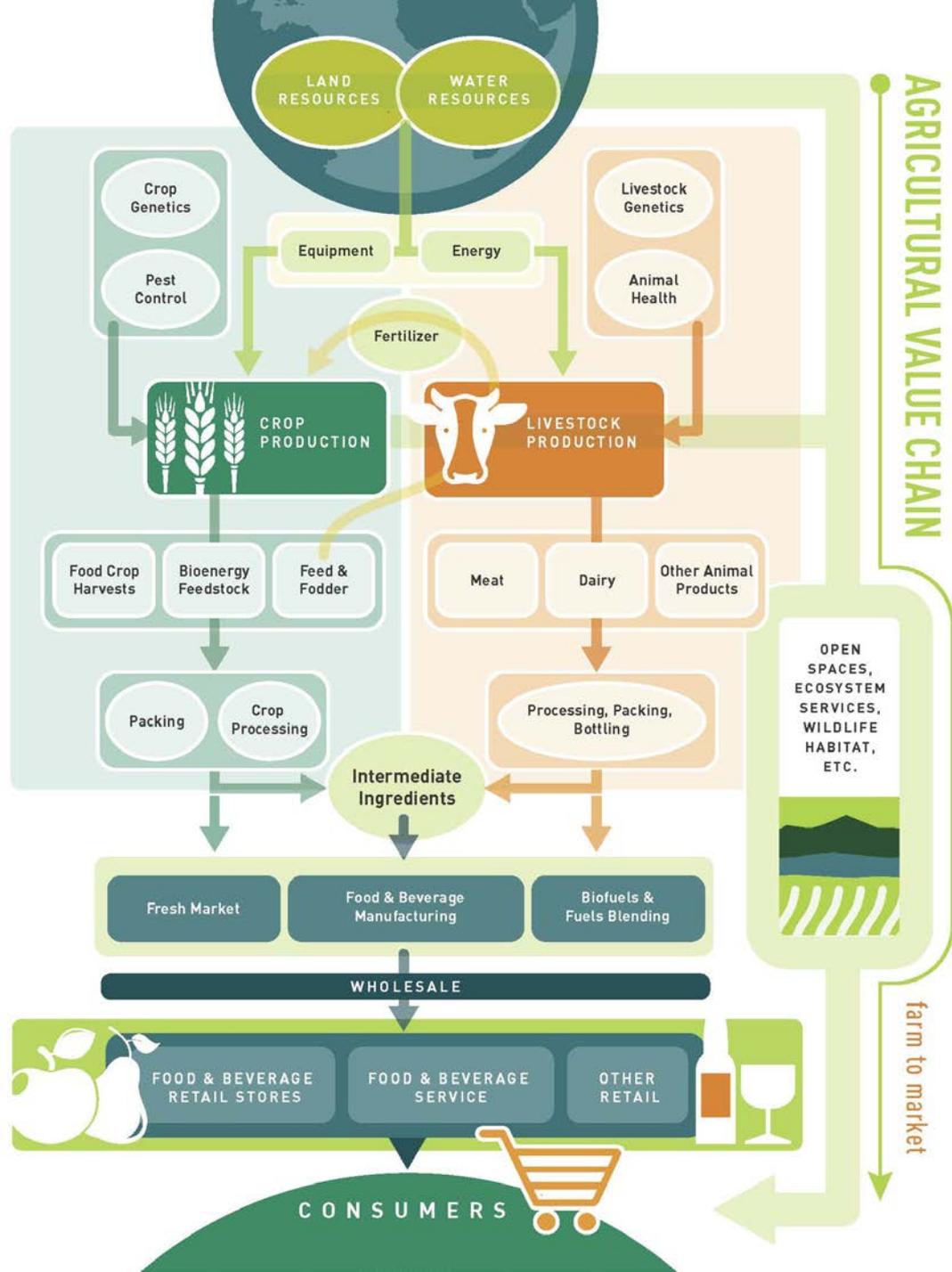


The Ups and Downs of Farming (but generally up over the decade)



Net returns to Colorado farm and ranch operators, over the last decade, with fitted trend line, 2005-2015





AGRICULTURAL VALUE CHAIN

farm to market

CONSUMERS

WHOLESALE

FOOD & BEVERAGE RETAIL STORES

FOOD & BEVERAGE SERVICE

OTHER RETAIL

Fresh Market

Food & Beverage Manufacturing

Biofuels & Fuels Blending

Intermediate Ingredients

Processing, Packing, Bottling

Meat

Dairy

Other Animal Products

CROP PRODUCTION

LIVESTOCK PRODUCTION

Crop Genetics

Pest Control

Equipment

Energy

Fertilizer

Livestock Genetics

Animal Health

OPEN SPACES, ECOSYSTEM SERVICES, WILDLIFE HABITAT, ETC.

LAND RESOURCES

WATER RESOURCES



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THE COLORADO BLUEPRINT'S EIGHT CROSS-CUTTING THEMES





1. Create a business friendly and consumer friendly regulatory environment.
2. Address how scale impacts market performance, access and opportunities.
3. Develop workforce and youth to support agricultural sector.
4. Spur innovation and technology for food and agriculture.
5. Create and retain food and agricultural firms in Colorado.
6. Enhance access to capital for agricultural and food firms.
7. Support a Colorado brand that reflects the unique qualities of its agriculture, food, and beverages.
8. Foster the interface of food and agriculture with key support resources to contribute to vibrant communities.





An offer / invitation

- Presentation and discussion of value chain data and report for
 - Industry groups
 - Growers' associations
 - Individual companies
 - Board meetings
- To brief your members, employees, leadership
- To provide feedback to the CSU Value Chain team





Thank you,
Colorado agriculture!