

A wide-angle photograph of a large-scale cattle feedlot. In the foreground and middle ground, hundreds of cows of various breeds (brown, black, white, and spotted) are packed closely together in muddy, dark-colored pens. Some cows are standing, while others are lying down. The pens are separated by metal fencing. In the background, the feedlot continues to stretch out towards a flat horizon under a clear sky. A few utility poles and distant structures are visible on the horizon.

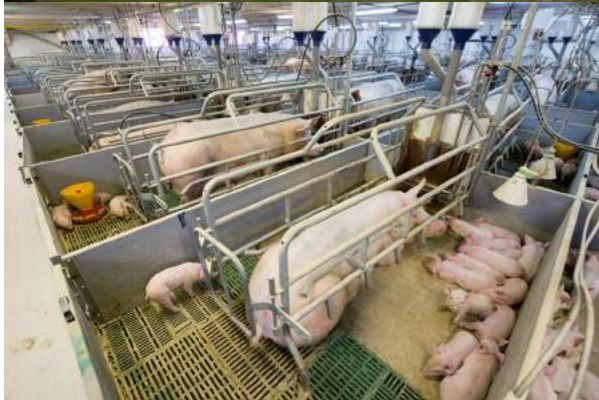
CAFOs and the Farm Bill

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What are CAFOs?

- As defined by USDA:
 - “An animal feeding operation in which animals are raised in confinement and has greater than 1000 ‘animal units’ confined for over 45 days a year.”
 - 1000 “animal units” = 1000 head of beef cattle, 700 dairy cows, 2500 swine weighing more than 55 lbs, 125,000 broiler chickens, or 82,000 laying hens.
- As of 2016 there were around 212,000 animal feeding operations in the US, 19,496 of which were CAFOs.

Swine



Chicken/Eggs

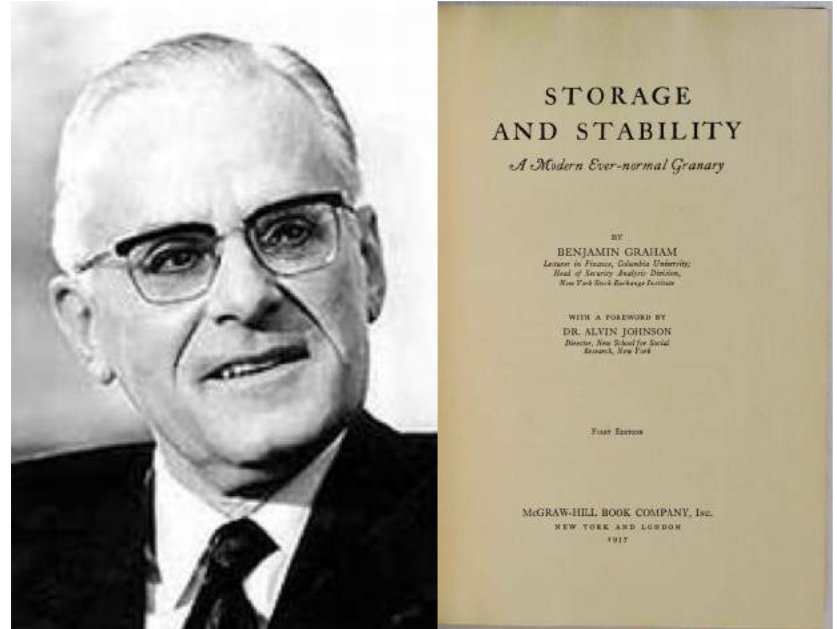


Beef/Dairy

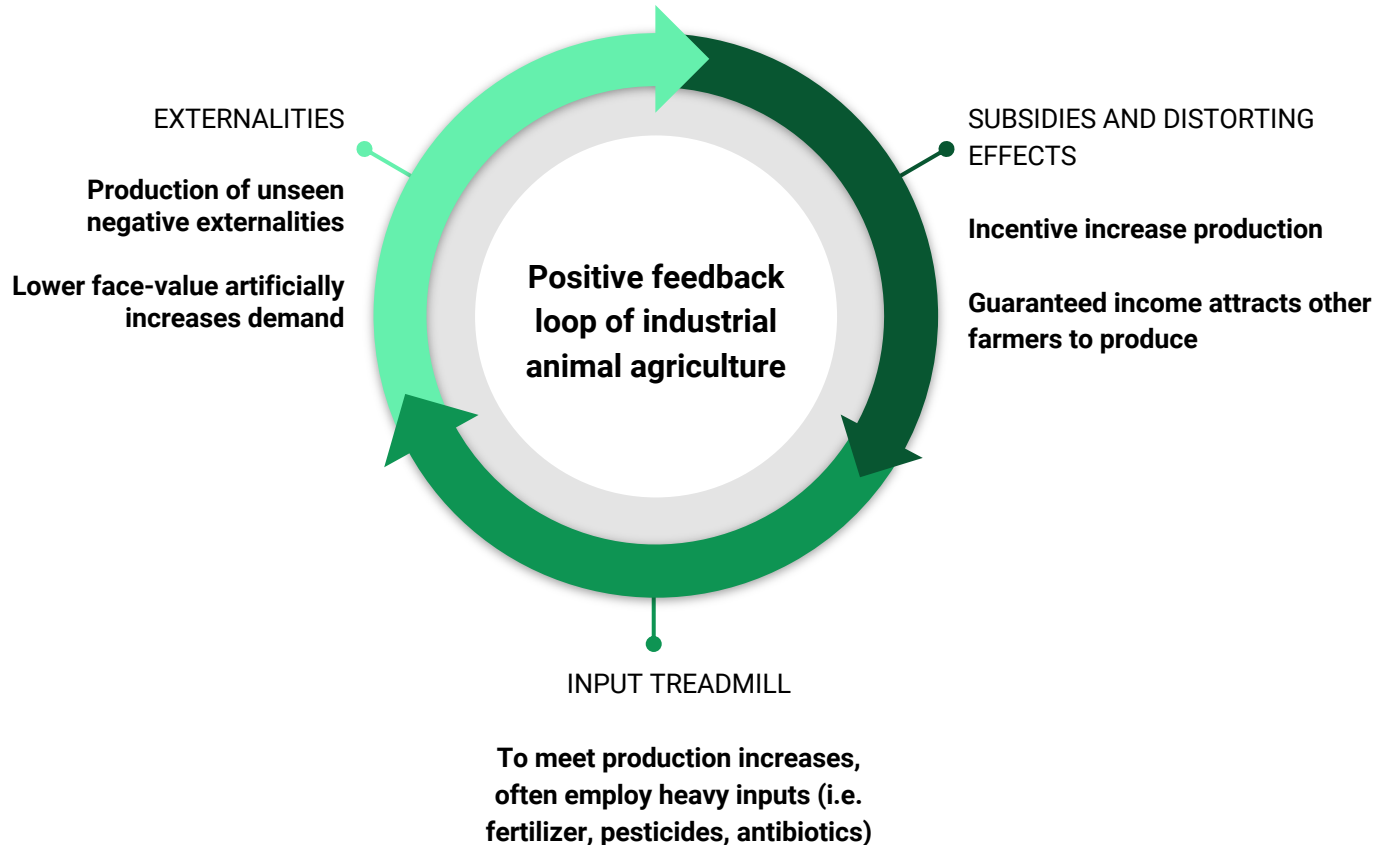


How it affects the food industry: Brief History

- Farm support previously in supply-management (i.e. Ever Normal Granary)
- Earl Butz: Secretary of Agriculture under President Nixon
 - “Get big or get out!”
- This has largely been the federal agriculture motto ever since
 - Farm Bill is a major indicator



How it affects the food system



How it affects the food system

- No federal animal welfare legislation
 - Animal Welfare Act (1966)- *excludes all farm animals*
 - Attempted amendments for “pet” animals in 2008
 - Proposed 2017 marker bill: Opportunities for Fairness in Farming Act
 - Sen. Mike Lee (R-UT)
- Environmental impacts
 - Deforestation, eutrophication, soil erosion, GHG emissions
 - Burden of blame on ALL producers



Deforestation



Water
Footprint

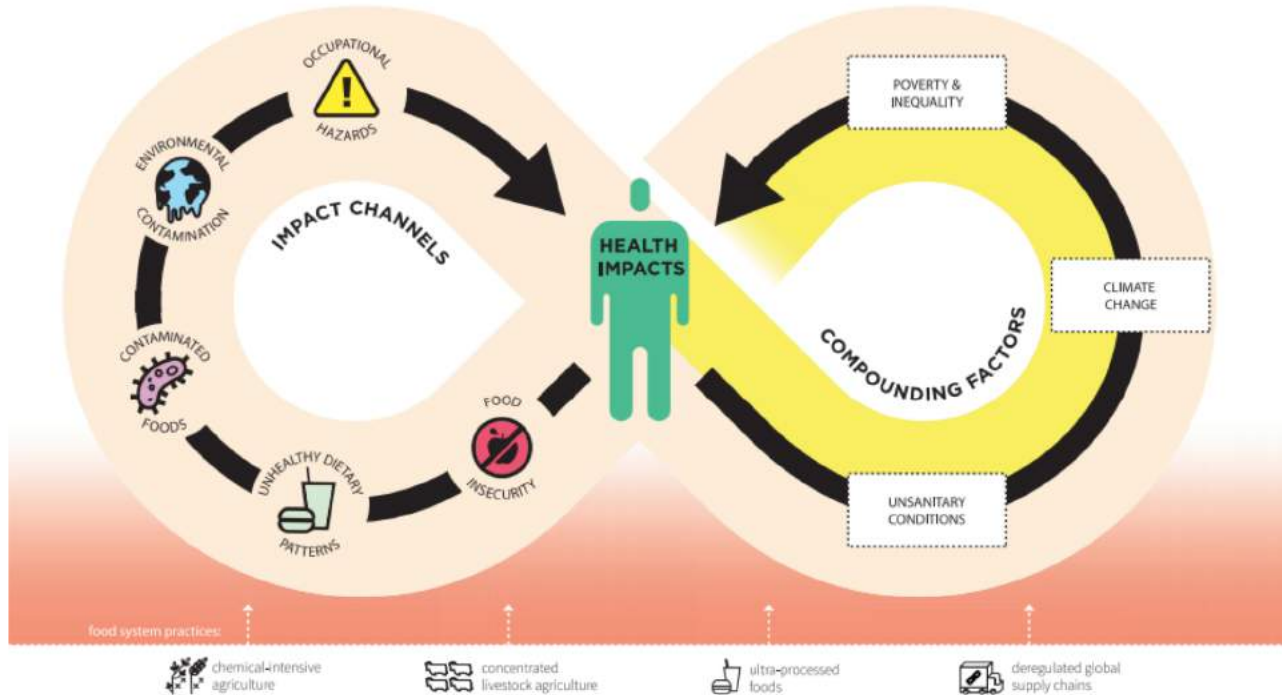


Soil Erosion



Eutrophication

How it affects the food system



Food-health Nexus largely influenced and caused by industrial animal agriculture

- NCGA 2017 Farm Bill Position: “Support a coordinated and aggressive effort to promote increased consumption of meat and dairy products”
- US consumes ~20 kg meat/capita more than the [OECD average](#)
- Antibiotic resistance, endocrine disrupting molecules, water contamination, chronic disease

How it affects the food system

Sector	2017 Lobbying Totals	Top Contributors	Top Recipients
Livestock	\$3.53 million	National Pork Producers, National Cattlemen's Association	Gianforte, Greg House, R-MT
Dairy	\$5.92 million	Land O'lakes, International Dairy Foods Assn	Valadao, David House, R-CA
Poultry & Eggs	\$1.69 million	National Chicken Council, Sanderson Farms	Conaway, Mike House, R-TX
Meat Processing	\$4.86 million	Smithfield, Tyson Foods, JBS	

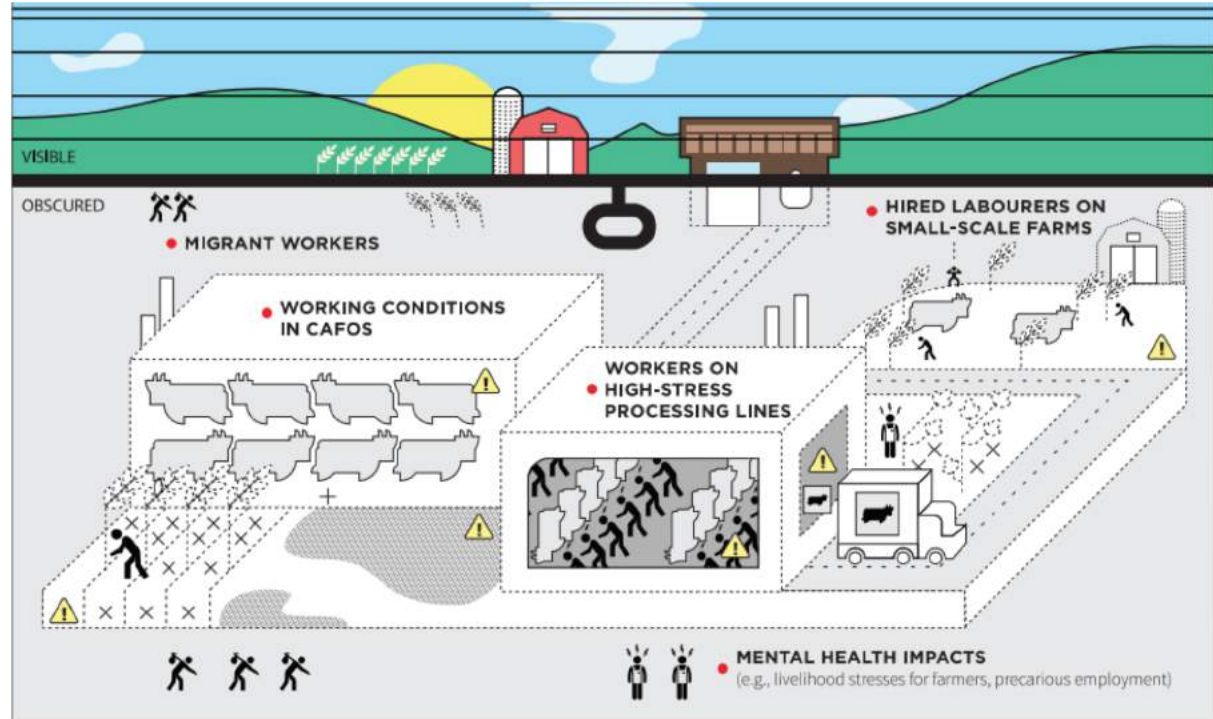
Center for Responsive Politics, 2017



Haas Institute for a Fair and Inclusive Society: The US Farm Bill

How it affects the food system

- Labor Rights
 - First exposed by *The Jungle*
- Social Impacts
 - Studies have shown that CAFOs are much more likely to be concentrated in higher minority areas, after being adjusted for population density, rural location and cheaper land (Nicole, 2013)
- Impacts on nearby property values
 - Declines depend heavily on distance
 - -6.6% with 3 miles, up to -88% within 1/10 mile (CDC, 2010)



How are CAFOs incentivized in the Farm Bill?

Directly

Title II - Conservation

Title V - Credit

Indirectly

Title I - Commodities

Title VII - Research



Title I - Commodities

- CAFOs = top consumers of U.S. corn and soybeans
 - Feed expenses are largest input cost
- Industrial animal ag sector has benefited greatly from cheap corn, soybeans, and other feeds subsidized by the farm bill's commodity programs.
 - Especially between 1996-2014 when direct payments were allowed
 - A 2007 [Tufts University study](#) found that factory farms saved \$34.8 billion between 1997 and 2005 from the low prices on feed grains
- Provide greatest advantage to industrial livestock production. Small and midsize farmers who grow their own feed grains as well as farmers and ranchers who raise livestock on grass-base pasture, receive little to no benefit.

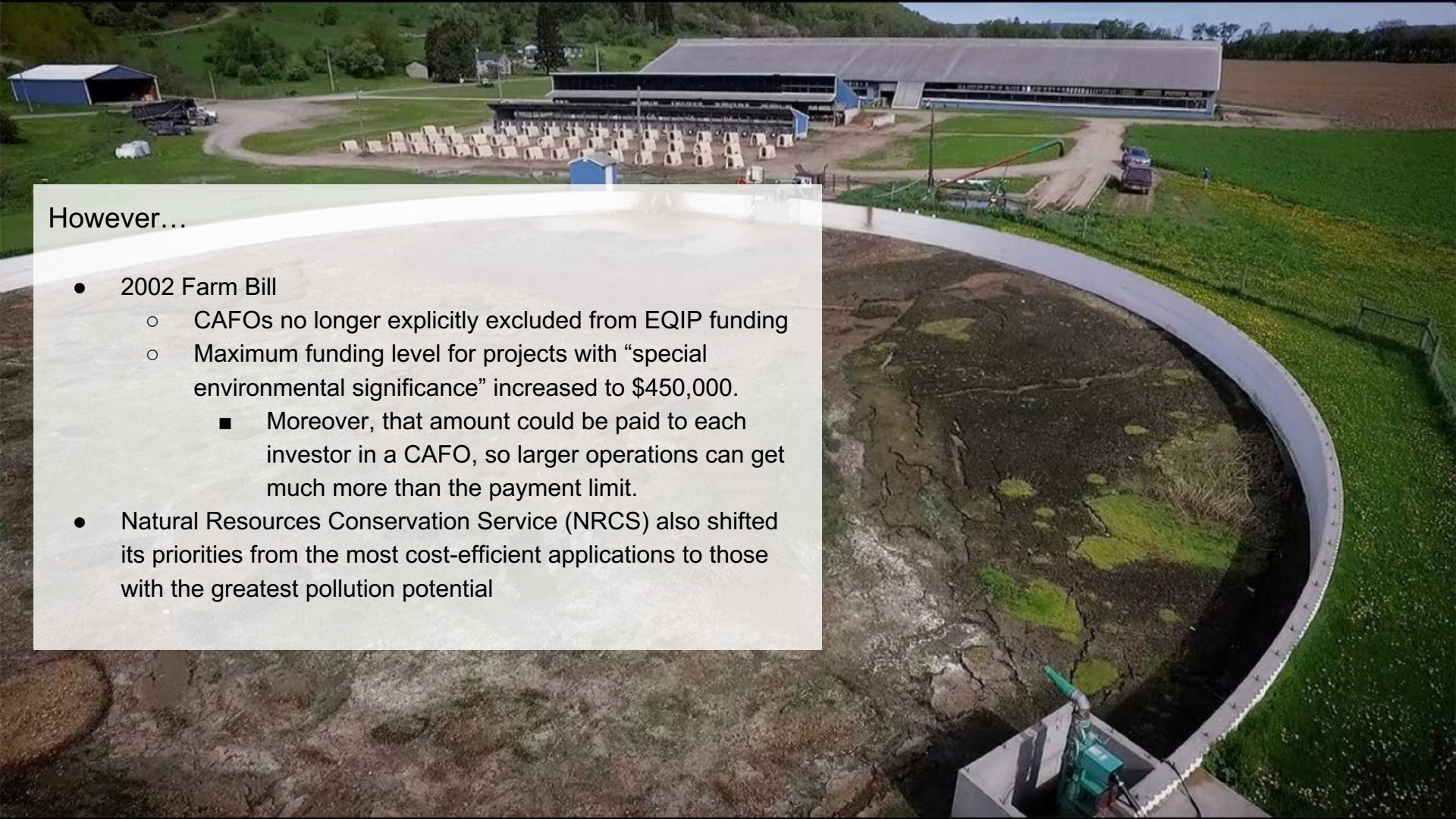




Title II - Conservation

Environmental Quality Incentives Program (EQIP)

- Administered at the state-level by National Resources Conservation Service (NRCS) agencies
- “Provides financial and technical assistance to agricultural producers in order to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation or improved or created wildlife habitat.”
- Originally intended to help smaller farming operations reduce pollution
- Examples of EQIP initiatives:
 - Implementing high tunnel systems (“hoop houses”)
 - Use of cover crops
 - Enhancing crop rotation
 - Developing prescribed grazing plans
 - Improving irrigation efficiency

An aerial photograph of a farm. In the background, there is a large, long barn with a grey roof. To the left of the barn is a smaller blue barn. In front of the barn, there is a field of yellow flowers. In the foreground, there is a large, circular concrete structure, possibly a water storage tank or a large well. The structure has a concrete wall and a dark interior. The ground around the structure is cracked and dry. A green pump or motor is visible on the side of the structure. The overall scene is a rural farm setting.

However...

- 2002 Farm Bill
 - CAFOs no longer explicitly excluded from EQIP funding
 - Maximum funding level for projects with “special environmental significance” increased to \$450,000.
 - Moreover, that amount could be paid to each investor in a CAFO, so larger operations can get much more than the payment limit.
- Natural Resources Conservation Service (NRCS) also shifted its priorities from the most cost-efficient applications to those with the greatest pollution potential



Large portion of funds now designated for CAFO waste management.

In FY 2016, 11% (approx. \$113 million) of EQIP funds were allocated toward CAFO operations, including:

- Waste storage facilities (\$51,634,622)
- Waste facility covers (\$33,582,510)
- Animal mortality facilities (\$8,867,865)
- Manure transfer (\$7,779,326)

Less support is available for small and mid-sized farms trying to implement sustainable management practices.

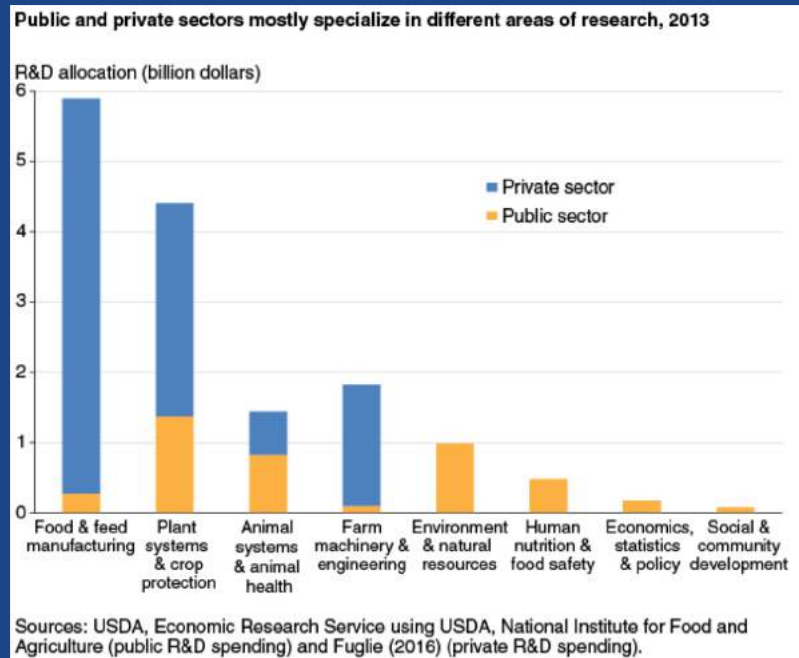
Title V - Credit



- Currently, many of the largest FSA guaranteed loans finance the construction of CAFOs.
 - Contract farmers are required to spend vast sums of money to convert their farms into large operations
 - Often secure these funds through federally-backed guaranteed loans
 - However, they don't actually own main production elements (i.e. feed and animals) that impact their ability to generate revenue → debt
 - With current demands for FSA loans so high, this leaves significantly less capital to distribute among small and mid-sized or beginning famers, who rely on those loans to keep their businesses afloat.
 - Not subject to any environmental review

Title VII - Research, Extension, & Related Matters

- Sustainable and organic agriculture not a priority for research funding
- DeLonge et al (2015) found that US public funding of sustainable agriculture is a small fraction of total of USDA Research, Extension & Economics budget
 - Accounted for \$294 million of \$2.8 billion (approx 11%); however, a much smaller portion of funds went toward systems-based agroecology research.
- Part of a larger overall trend of a decrease in public funding as a percent of total research funding



Where else but the Farm Bill?

Animal Welfare

- Humane Methods of Slaughter Act, 1958 - USDA
- Animal Welfare Act, 1966 - USDA
- Organic Livestock and Poultry Practices, 2017 - USDA

Air and Water Regulations



- Clean Water Act, 1972 - EPA
 - National Pollution Discharge Elimination System (NPDES)
 - Clean Water Rule (Waters of the United States, WOTUS), 2015
- Clean Air Act, 1963 - EPA
- Right to Know Laws - EPA

Food Safety, Human Health, and Labor

The background of the slide is a photograph of a large-scale pig farming operation. Numerous pigs are visible, packed closely together in rows of metal cages or pens. The environment appears industrial, with concrete floors and metal railings. The lighting is somewhat dim, and the overall tone is somber, reflecting the themes of food safety and labor conditions discussed in the text.

- Food Safety and Inspection Service - USDA
- FDA and antibiotic use
 - New “Judicious Use” Rule, 2017
- Worker Safety - OSHA
- Immigration - ICE

Consolidation and Anti-Trust



- Anti-Competitive Behavior - DOJ
- Packers and Stockyards Act of 1921 - USDA
- 2008 Farm Bill's attempt to enforce fair competition

California State Regulation

The background image shows a dairy farm setting. In the foreground, several black and white cows are in a milking parlor, with their heads in metal stalls. In the background, a green recycling truck is parked on a dirt or gravel surface. The scene is brightly lit, suggesting daytime.

- CalRecycle
- CA Air Resources Board
- CA Department of Food and Agriculture
- State Water Resources Control Board
- 21 regional air quality management districts
- 9 regional water quality control boards
- Proposition 2, 2015

Recommendations To Improve Federal (and State) Responses

Farm Bill Recommendations

- 1) Title 1- Commodities
- 2) Title II- Conservation
- 3) Title V- Credit

Non- Farm Bill Recommendations

- 1) FDA - Antibiotics
- 2) USDA Meat Animal Research Center
- 3) OSHA
- 4) California: Cap and Trade

The background of the slide is a stylized American flag, featuring a blue field with white stars on the left and red and white horizontal stripes on the right.

Recommendations for the upcoming Farm Bill

1) Title 1- Commodities

- a) Payment Limits, Crop Insurance Subsidy Limits, Shift to PLC (?)

2) Title II- Conservation

- a) Prohibiting EQIP funding to new or expanding CAFOs
- b) Limiting allowable impervious surface area for the Agricultural Land Easement (ALE) component of the Agricultural Conservation Easement Program (ACEP)

3) Title V- Credit

- a) Prohibit the usage of limited Farms Service Agency loan funding for large CAFO loans.
- b) Require that FSA loans for CAFOs be supported by a contract that commits the integrator to delivering a sufficient number of animal units per year to cash flow the loan - establish dependable funding source
- c) Require FSA Loans for CAFOs to be a similar length to the supporting contract
- d) Ensure that All FSA loans for large CAFOs undering an Environmental Assessment or Environmental Impact Statement analysis prior to approval
- e) Prohibit CAFOs from qualifying for expedited loan procedure under FSA's preferred lender program

Additional Recommendations

- FDA/CDC- Antibiotics
- USDA Meat Animal Research Center
- OSHA
- Transport: Animal Welfare Act
- CA State Government: Cap and Trade



Ideally,

- Reduce Farm Bill incentives for ever-increasing commodity production
 - May reduce the amount of human food fed to livestock
 - May kick-start a movement toward alternative, sustainable animal agriculture
 - Decouple CAFOs from commodity support
- Utilize revenue saved from reducing CAFO access to federal loans to provide transitional loans
 - Farmer training, etc.
- Overall, increased adoption of alternative systems





Thank you!

References

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