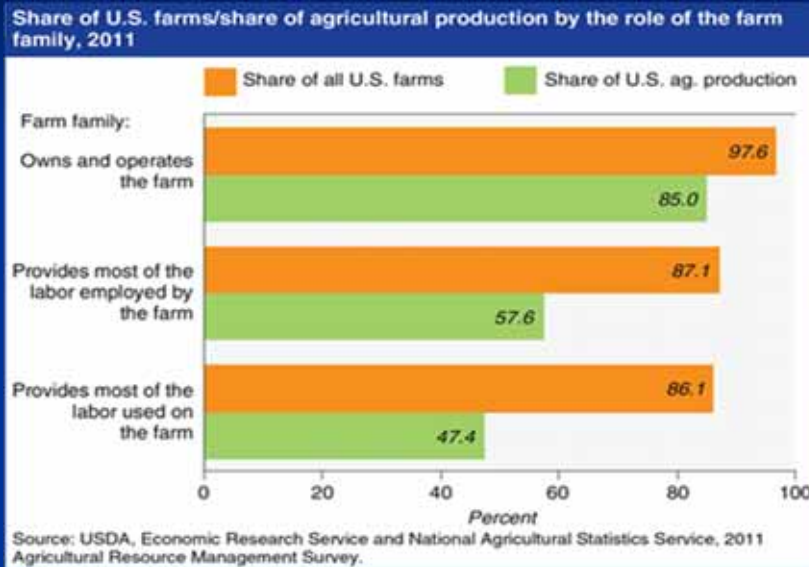




# Ag Statistics & Industries

## Farming in the U.S. is a Family Enterprise



**AGRICULTURE IN THE U.S.**

**BIG & DIVERSE**

**2,000,000 FARMERS, 1% OF POPULATION**  
**900,000 TILL 60% ACREAGE**

**80% Domestic – 20% Exports**

**SINCE 1950 – 170% INCREASE IN PRODUCTIVITY**  
**26% LESS LAND – 22,000,000 LESS FARMERS**

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**DELAWARE**

SMALL STATE, but 40% of land mass is in Ag  
 500,000 acres – 2,500 farmers  
 800 till 65% of acreage/40% irrigated

Corn, Soybeans, Wheat, Barley, Poultry  
 Strong Vegetable Industry

Within 8 hours of 1/3 of US Population or 110 million people

## Major Field Crop Acreage (2018) Delaware

	<u>Acres</u>	<u>Uses</u>
Corn (Maize)	180,000	Feed
Soybeans	160,000	Feed/oil
Wheat	75,000	Feed/Flour (PA)
Barley	32,000	Feed/Beer (Malted)
Grain Sorghum	<1,000	Feed

## Major Crop Acreage – U.S.

	Acres	Hectares
<b>Corn (Maize)</b>	<b>97,000,000</b>	<b>39,000,000</b>
<b>Soybeans</b>	<b>76,000,000</b>	<b>30,400,000</b>
<b>Wheat</b>	<b>49,000,000</b>	<b>19,600,000</b>
<b>Cotton</b>	<b>9,378,000</b>	<b>3,751,200</b>
<b>ALL Vegetables &amp; Fruit</b>	<b>5,463,000</b>	<b>2,185,200*</b>

## Corn

- U.S. largest corn producer and exports 10-20%.
- Most widely produced feed grain in U.S. – 95% total feed grain production and use.
- Also processed into food (starch, sweeteners, corn oil, flakes for cereal/flour/grits/meal, beverage alcohol/brewer grits) and industrial products (alcohol and fuel/ethanol).

## Soybeans

- Are world's largest processed source of animal protein feed and second largest source of vegetable oil.
- Comprise 90% of U.S. oil seed production with peanuts, sunflower, canola/rape, and flax making up remainder.
- One of first bioengineered crops (herbicide resistant & enhanced nutrition –high oleic).

## Wheat

- Ranks third among U.S. field crops.
- European Union, China, India, Ukraine and Russia now produce more wheat than U.S.
- Production declining due to profitability and global competition.
- Five major classes of wheat - Hard Red Winter (40%), Hard Red Spring (20%), Soft Red Winter (15-20%), White (10-15%) and Durum (3-5%) - all with different end use and production areas.
- No Genetically Modified (GMO) wheat grown in U.S.

## Cotton

- Most important textile fiber in world.
- U.S. is world's third largest producer and leading exporter accounting for 1/3 global trade.
- Cotton Belt- 17 southern states from VA to CA with Texas largest producer (45%).
- Two kinds grown: (1) **Upland** used for apparel, curtains, upholstery, hospital/medical and (2) **Pima** used for expensive/high end apparel and sewing thread.
- One bale of cotton makes 200 pairs of jeans or 1200 tee-shirts.

## Grain Sorghum (Milo)

- Important U.S. Grain Crop: 5.1 million acres planted in 2018 valued at \$1.2 million
- In DE (2018) had 450 acres planted. Important rotational crop for nematodes and very drought resistant compared to corn
- Top Milo states in U.S. include Kansas (#1), Texas, Colorado, South Dakota
- Uses include livestock feed (high in protein), human food (Asia and Africa), flour, syrups, and processed into ethanol (fuel)

## **Industrial Hemp (*Cannabis sativa*)**

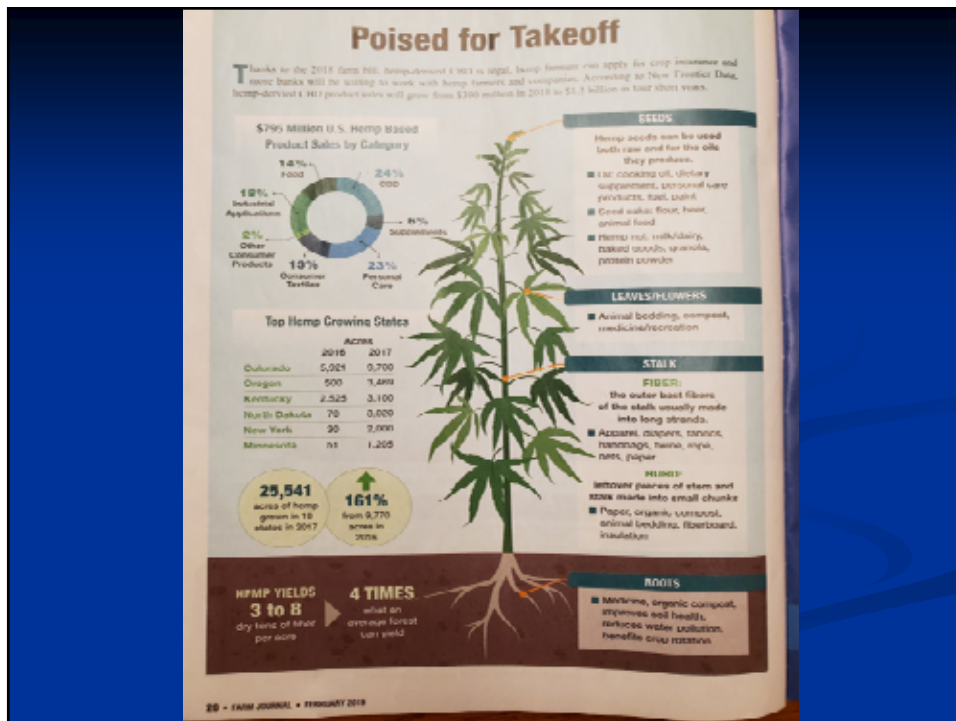
- Is strain of Cannabis plant grown for agricultural products such as textiles/fibers, seed and oils
- 2018 Farm Bill legalized production of hemp in U.S. (41 states). Led to opening up national & international hemp markets. Individual states regulate production and certification/validation
- Still restrictions on what can be done with this plant and its derivatives (ie. CBD oil).
- Major challenges with FDA and approval of cannabis products in food and dietary products

## **Hemp vs. Marijuana**

- Both hail from the Cannabis Sativa family but have VERY different uses and physiological & biological properties
- Most notable is amount of psychoactive chemical tetrahydrocannabinol (THC) – compound that produces a high
- Hemp (<0.3% THC) vs. marijuana (5 to 35% THC)

## More on Hemp

- As of January 2019 41 states with some type of production
- States leading production are Colorado, Oregon, Kentucky, North Dakota, New York and Minnesota. Currently, 70% grown for CBD, 20% for seed and 10% fiber
- U.S. buys \$60 million of hemp from countries such as China, which produces 50% of world's cannabis supply



## Importance of U.S. Farm Bill

- Since 1933 – 17 “Farm Bills”
  - **Safety Net** for economic viability of Farmers: **Income Support for farmers . . . . Also, Trade is emerging as a key part of the safety net**
  - **Safety Net** to provide food for poor people and school lunch nutrition programs. Food Stamps or **SNAP** (Supplemental Nutrition Assistance Program (Since 1960s)
    - This created the urban/rural coalition
  - **Conservation**
- Major Farm Safety Net (Income Support) Management Goals:
  - **Influence Supply** (primarily 1933-1950, still exists but evolving to risk management)
  - **Increase Demand** (1950-now)
  - **Risk Management** --- Crop Insurance
    - 1990s to today

## Farm Bill – Safety Net

- **Components or “Titles”**
- Nutrition
- Crop Insurance
- Conservation
- Commodity Support
- Other
  - Research
  - Renewable Energy
  - Miscellaneous

