

# Economic Update: Pigs and Pork

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## **Pigs and Pork Sector**

- 1. Situation and Outlook**
- 2. Residuals Management**
- 3. Economic Impact**

# **Pigs and Pork Sector**

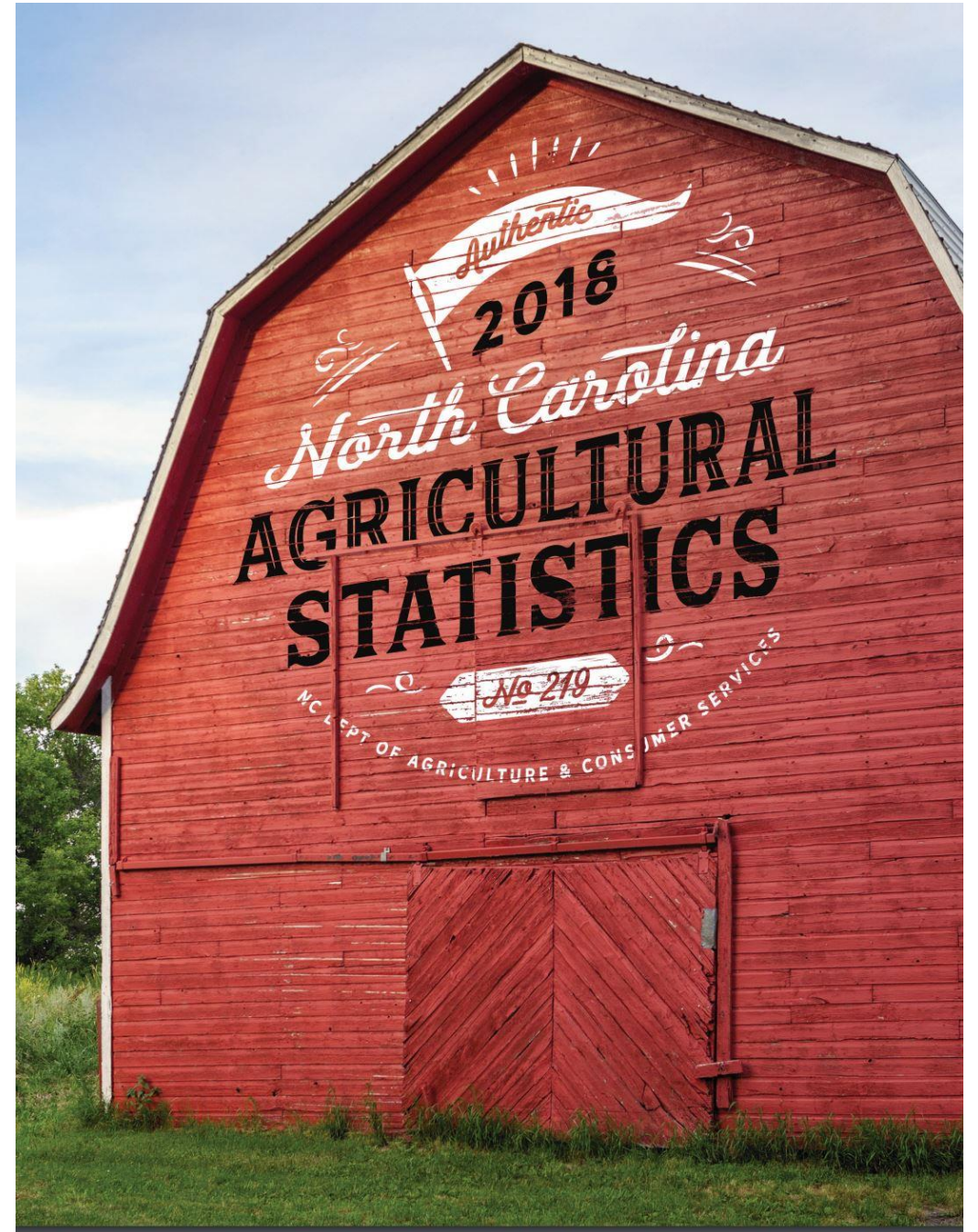
## **1. Situation and Outlook**

NCDA&CS in partnership with USDA NASS  
Produces the North Carolina Ag Statistics book annually.

It is one of several good references Available at :

<http://www.ncagr.gov/stats/>

Good source of descriptive statistics for NC agriculture.





## Data from North Carolina Agricultural Statistics 2018

Pig Crop Dec 16 to Nov 17	18.9 million head	ranked 2 <sup>nd</sup> nationally
Hogs and Pigs (inventory)	9.0 million head	ranked 2 <sup>nd</sup> nationally
<b>Pigs for Breeding (12 1 2017 Inventory)</b>	<b>900,000</b>	<b>14.6% of US</b>
<b>Market Hogs (12 1 2017 Inventory)</b>	<b>8,100,000</b>	<b>12 % of US</b>

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<b>Marketings 2017 (head)</b>	<b>17.73 million</b>	
<b>Marketings 2017 (pounds)</b>	<b>4.43 Billion</b>	
<b>Cash Receipts 2017</b>	<b>\$2.34 Billion</b>	

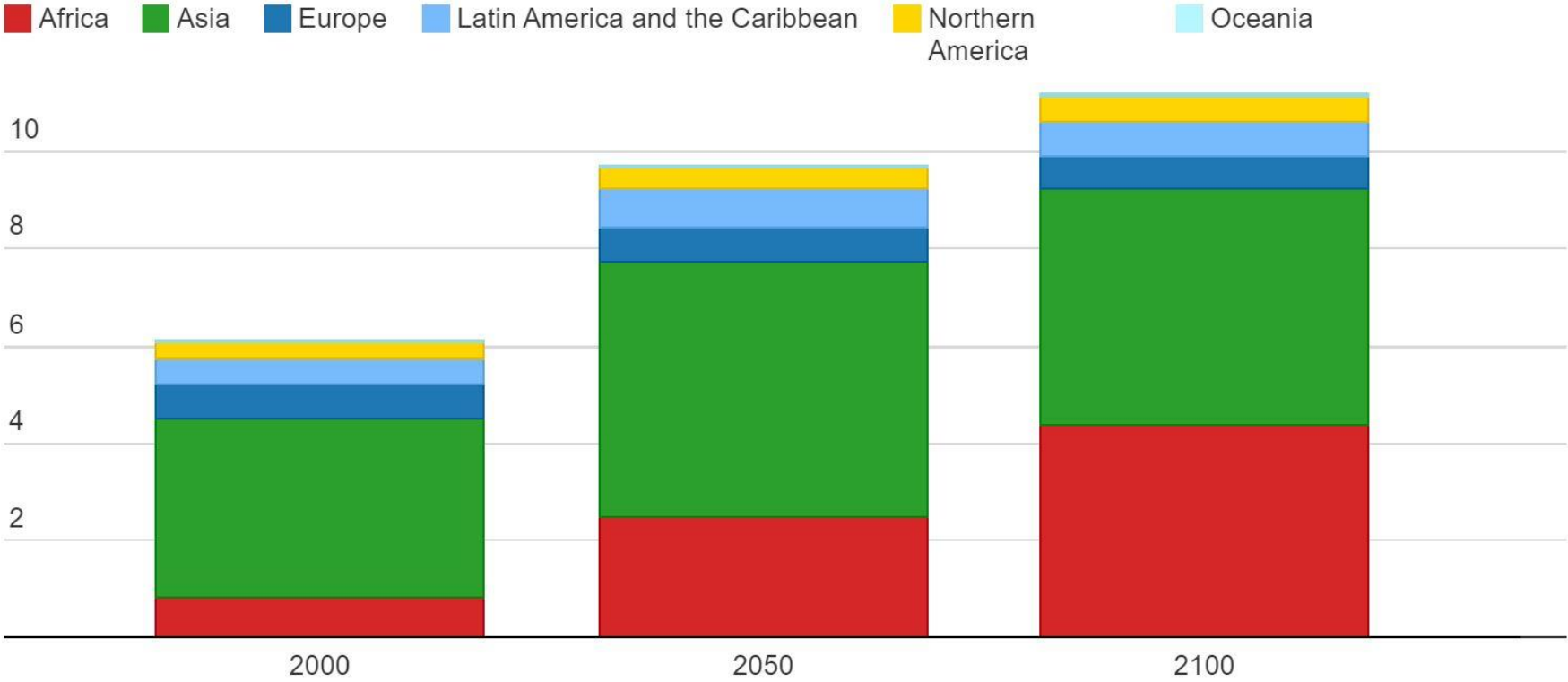
# **Drivers of Change in 2019**



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- 1. Continuing global growth in population and in GDP**

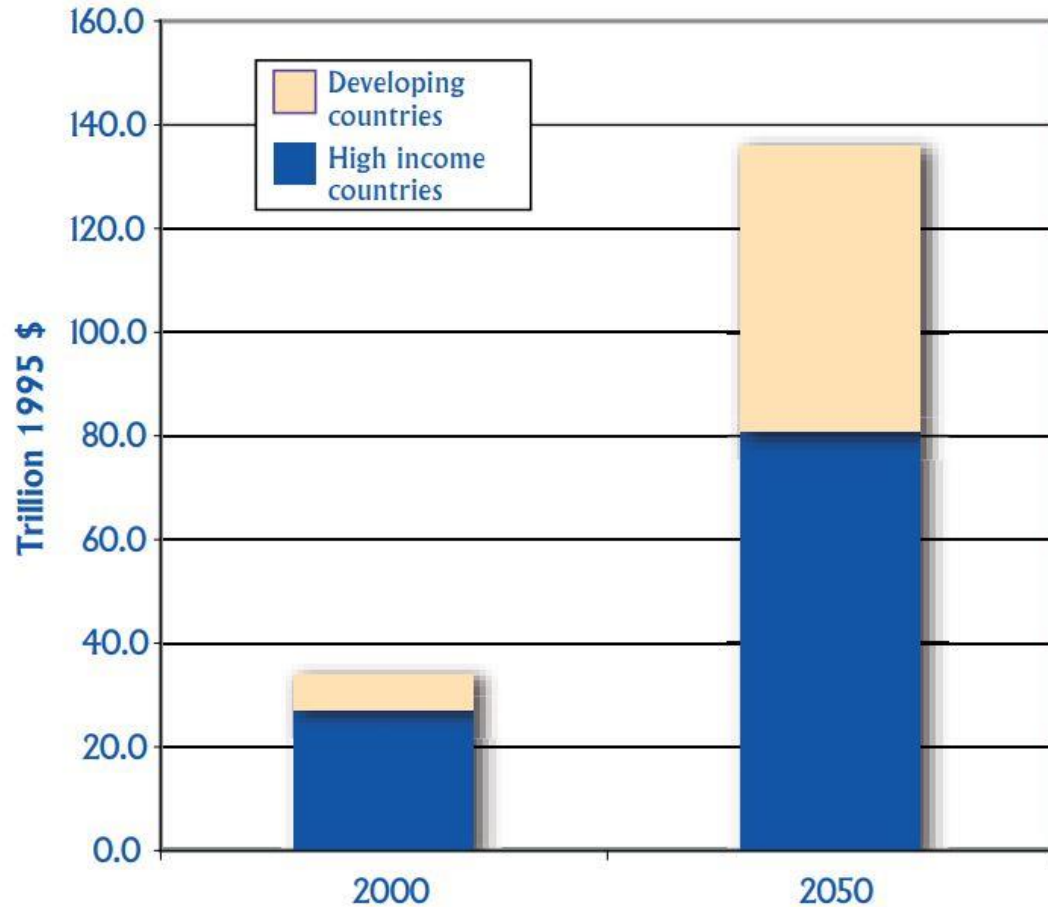
# UN Regional Population Projections (Billions, 2000 - 2100)



Source: [UN Medium-Variant Projection, 2015](#) [Get the data](#)

Global population is predicted to grow from 7.7 billion today to nearly 10 billion by 2050 (+30%).

Figure 1.2 Historical and projected GDP



Source: The Road to 2050, World Bank, 2006.

**Global GDP (~ income) is projected to increase from about \$80 trillion today to about \$270 trillion by 2060 (OECD) (+230%)**

**People increase food consumption and increase meat as a share of food as income rises.**

# **Drivers of Change in 2019**

## **2. International Trade**

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# Drivers of Change in 2019

## 2. International Trade

China produces and consumes about half of global pork

More than 20% of US pork is exported...

...but a small percentage of value goes to China

Tariffs by China were said to cost US pork producers up to \$60 million per month at first but then less as trade patterns adjusted.

# Drivers of Change in 2019

## 3. Emergence of Alternatives to Meat (e.g. Beyond Meat, Impossible Burger)

Notable in 2019: offerings by large restaurant chains

Unclear consumer acceptance, price

Unclear substitutability for various  
meat products??? ...pork???

A large experiment is underway.

## US Pig Prices Affected by:

Exchange Rates

Tariffs

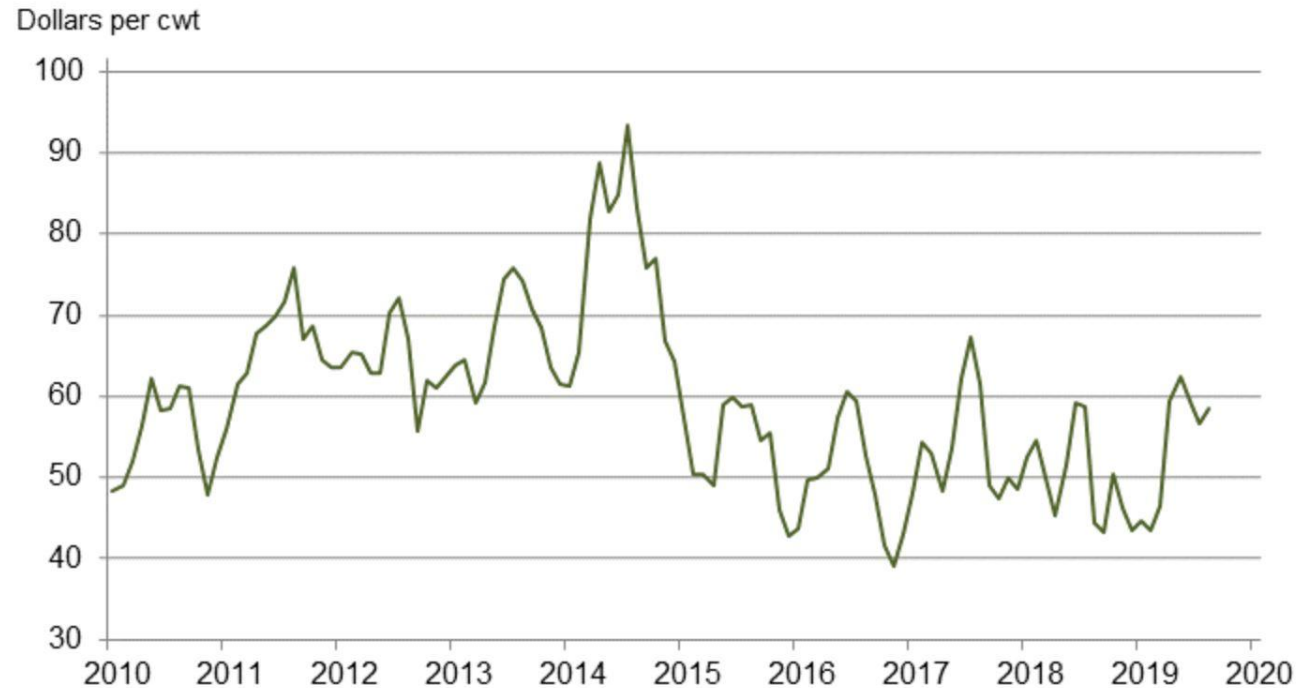
African Swine Fever in China

China Pig Prices = 2x US

Lagged response to corn and  
soybean meal prices

Prices of competing meats

Prices Received for Hogs by Month – United States



USDA – NASS  
09/27/2019

Available Packing Capacity

Supply of pigs



# **Pigs and Pork Sector**

## **2. Residuals Management**

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**5 Nuisance suits against Smithfield tried and awarded to plaintiffs**

**Appeals filed**

**Suit filed to overturn NC laws passed to protect agriculture**

# **Pigs and Pork Sector**

## **2. Residuals Management**

**Smithfield and Dominion Energy Announce half billion \$  
Commitment to install renewable natural gas systems using hog  
manure.**

**Align Renewable Natural Gas (RNG)<sup>SM</sup>**

# **Pigs and Pork Sector**

## **2. Residuals Management**

**New General Permit for NC Swine Farms Issued**

**State Budget Process may defer implementation**

**Appeal filed by NCFB**

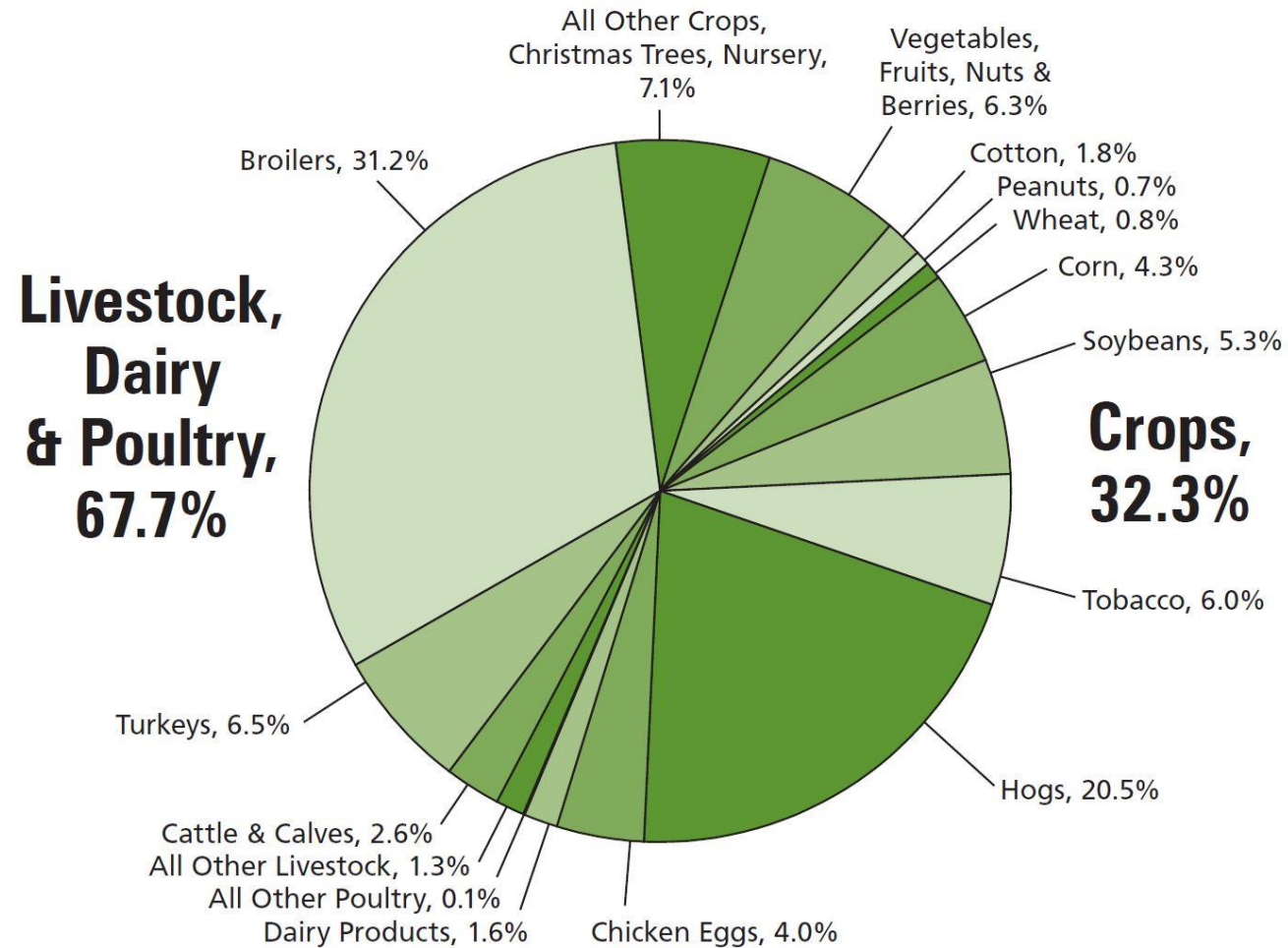
**Conference Session Thursday for the Real Story**

# **Pigs and Pork Sector**

## **3. Economic Impact**

# SOURCE OF FARM CASH RECEIPTS, NORTH CAROLINA, 2017

\$11,432,976,000



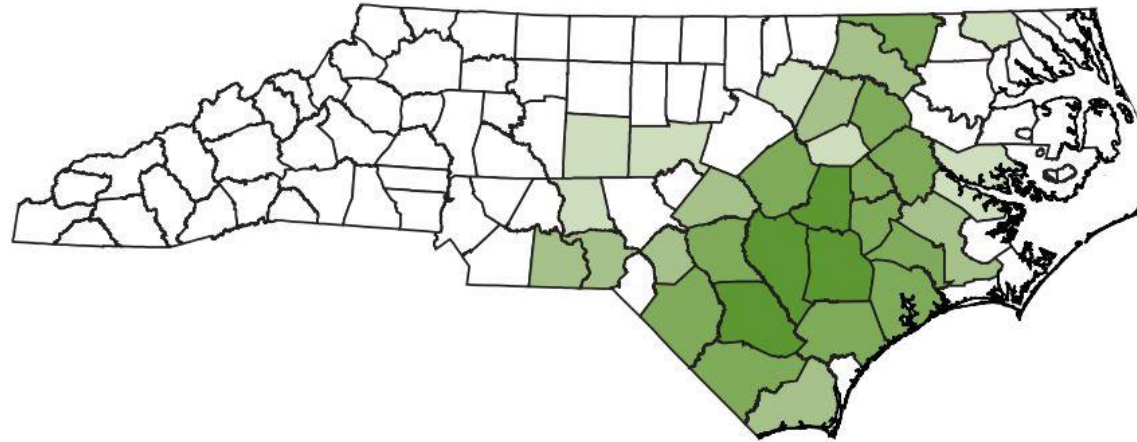
<sup>1</sup> All Other Crops includes hay, greenhouse, floriculture, nursery, cut Christmas trees, mushrooms and other miscellaneous crops.

# HOGS

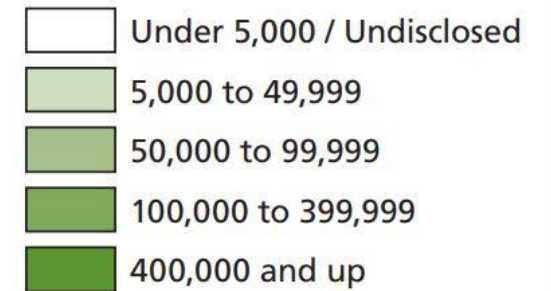
Number on Farms, December 1, 2017

Leading Counties <sup>1</sup>	Number
Duplin	2,000,000
Sampson	1,900,000
Bladen	720,000
Wayne	515,000
Robeson	350,000
Greene	340,000
Jones	295,000
Pender	280,000
Lenoir	275,000
Pitt	245,000

<sup>1</sup> Ranking of published counties only.



## Number



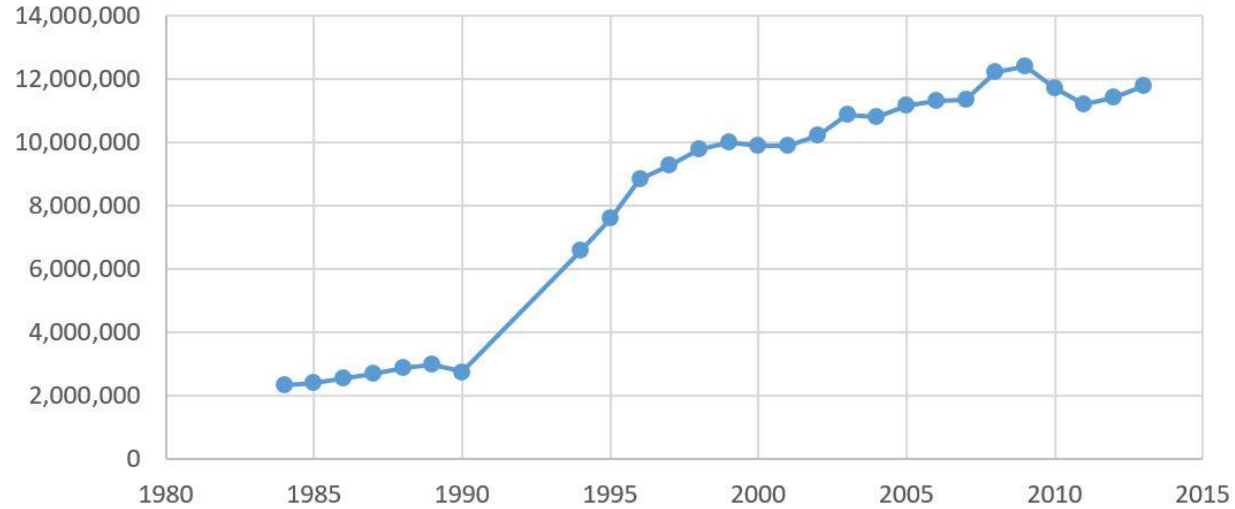
# HOGS

Number on Farms, December 1 (*Thousand Head*)

Source: NCDA Agricultural Statistics book, 2018

## North Carolina Hog Slaughter

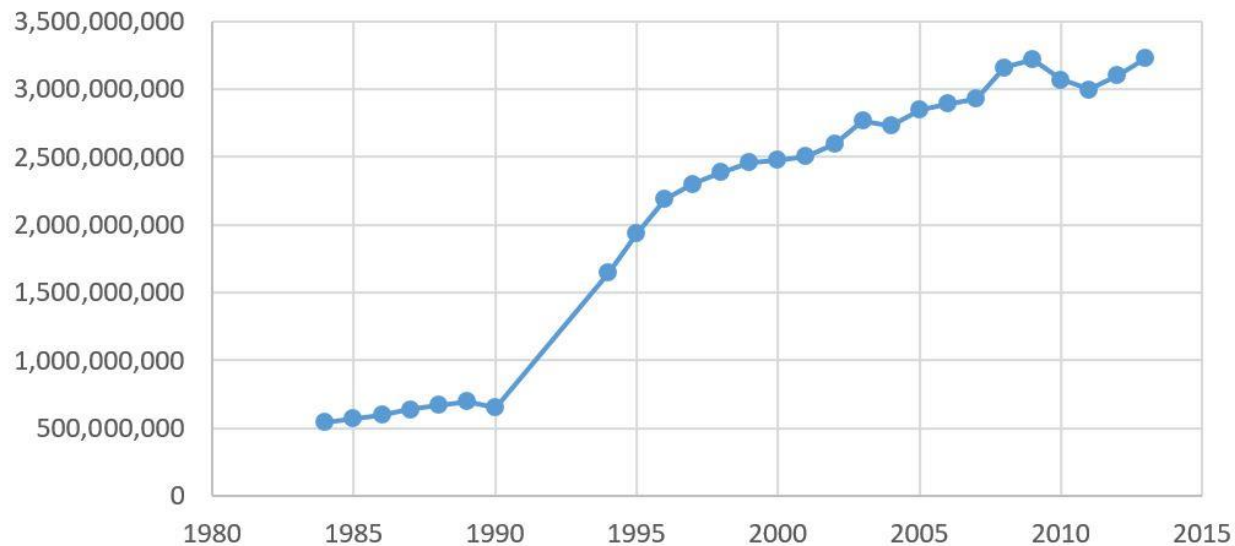
### Commercial Hog Slaughtered (Head) 1984-2013



We estimate 12 million head slaughtered in NC in 2018 weighing 2.5 billion pounds dressed or 3.55 billion lbs. live.

About 12 million pigs slaughtered in NC of 17+ million marketed.

### Commercial Hog Slaughtered (Weight) 1984-2013



Compiled from USDA Livestock Slaughter data



## **Pigs and Pork Sector**

### **3. Economic Impact**

**The economy and Economic Development are critical issues in rural communities in North Carolina and across the country (34 rural counties in North Carolina lost population between 2016 and 2017)**

## Whole Farm Sale Value in Nominal US Dollars by Swine Farm Type: per farm, per unit and per pound SSLW for Farm Sales 1997 – 2010.

		Nominal US Dollars					
		Per farm		Per unit		Per SSLW lb	
Farm type	n	Average	STD DEV	Average	STD DEV	Average	STD DEV
Farrow - Wean	25	2,320,155	1,383,210	912	218	2.17	0.36
Natural Vent Nursery	26	527,752	358,759	123	36	4.11	1.20
Tunnel Vent Nursery	16	743,267	417,683	128	36	4.28	1.21
Full Slat Finishing	40	1,033,727	752,333	184	43	1.36	0.32
Partial Slat Finishing	23	765,391	467,772	163	33	1.21	0.24

Source: van der Hoeven, Zering, and Kotsiri, North Carolina State University, 2011

**Buildings and Equipment Values in Nominal US Dollars by  
Swine Farm Type:  
per farm, per unit and per pound SSLW 1997 – 2010**

		Nominal US Dollars					
		Per farm		Per unit		Per SSLW lb	
Farm type	n	Average	STD DEV	Average	STD DEV	Average	STD DEV
Farrow - Wean	25	1,356,488	835,312	521	143	1.24	0.26
Natural Vent Nursery	26	243,544	138,179	56	8	1.88	0.28
Tunnel Vent Nursery	16	362,659	151,595	62	4	2.08	0.13
Full Slat Finishing	40	554,348	401,178	95	16	0.70	0.12
Partial Slat Finishing	23	351,812	237,607	70	14	0.52	0.10

Source: van der Hoeven, Zering, and Kotsiri, North Carolina State University, 2011

# **Pigs and Pork Sector**

## **3. Economic Impact**

**Based on sales data and professional appraisal data from sales of 130 farms with 'used' hog operations,**

**...buildings and equipment accounted for half the value of the farm. In other words, they doubled the value of the property.**

# **Pigs and Pork Sector**

## **3. Economic Impact**

**An (IMPLAN) input-output study of economic impacts of pigs and pork production (Zering 2019) estimated that the industries directly contributed \$5.9 billion in sales, \$1.7 billion in value added, and 19,298 full time job equivalents.**

**Adding indirect and induced effects raised those impact estimates to \$9.5 billion sales, \$3.5 billion value added, and 43,611 FTE jobs.**

# Pigs and Pork Sector

## 3. Economic Impact

The IMPLAN study also estimated effects of the further processing and rendering sectors.

Effects were also estimated for selected counties. For example, pigs and pork were estimated to account for 50% of the value added and 44% of the employment in Bladen county and 26% of value added and 23% of employment in Sampson county.

# Economic Update: Pigs and Pork

## Conclusion

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ARE 260 Swine Markets and Risk online (AgIdea, Swine Science Online)

ARE270, 370, 470, Agribusiness Entrepreneurship sequence

Collaborate on local business enumeration and development

Collaborate on financial tools for decision support; budgets,...

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