

Iowa's Comparative Advantage in Pork Production

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- At Iowa State University we have > 50 PhD/DVM scientists that work with pigs
- Colleges of Agriculture and Vet Medicine
- IPIC is responsible for the technology transfer from ISU to clients
- Work across Iowa, across the USA, and major international efforts

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State of Iowa



- Fertile land
 - No. 1 in corn, soybeans, hogs, eggs
- Low population
 - < 2,800,000
- Agricultural history
- Desire for sustainability


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Starting Points

- Iowa has extremely fertile land that is used primarily to grow corn/soybeans
- These crops need fertilizer and markets
- These two points will not change soon
- Higher oil prices have impacted Iowa's industries
 - Fertilizer costs, ethanol profitability, transportation costs


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Starting Points

- There is a strong demand for pork
- Iowa is the number one state in pork production
- There is competition for pork production
- Iowa has advantages for profitable pork production


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Starting Points

- There is a strong demand for pork
- Iowa is the number one state in pork production
- There is competition for pork production
- Iowa has advantages for profitable pork production
- What is the impact of high energy prices on this?*


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Pork Production in USA

Areas of largest sow farms


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Iowa's Advantages for Pork Production

- Primary cost of pig production is feed cost (~70%)
- Primary feed ingredients are corn/sbm
- Costs of feed is purchase plus shipping
- Corn/SBM cost less in Iowa
- Much lower shipping costs in Iowa


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Iowa's Advantages for Pork Production

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- Primary feed ingredients are corn/sbm
- Costs of feed is purchase plus shipping
- Corn/SBM cost less in Iowa
- Much lower shipping costs in Iowa
- *Result = cost less to raise pigs in Iowa*


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Iowa's Advantages for Pork Production

- Income from pork production comes from selling market hogs, plus other products of pork production
- Iowa has the most plants to market our hogs


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- Income from pork production comes from selling market hogs, plus other products of pork production
- Iowa has the most plants to market our hogs
- *Result, income advantage in marketing the pigs*

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Iowa's Advantages for Pork Production

- Other product advantage = Nutrient value of manure
- Must have a crop industry to capitalize on value of manure as a nutrient
- Iowa is number one state for corn and soybean production

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Iowa's Advantages for Pork Production

- Other product advantage = Nutrient value of manure
- Must have a crop industry to capitalize on value of manure as a nutrient
- Iowa is number one state for corn and soybean production
- Result is income advantage in marketing nutrients in manure*

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How Do Higher Energy Prices Affect Iowa's Pork Advantages?

- As energy price increases, oil based fertilizer prices increase, increasing the value of nutrients in manure
- As energy price increases, shipping costs increase

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Bottom Line:

Iowa's Advantage Improves with Higher Energy Prices

- The value of manure recycled as a crop nutrient increases
 - Grain deficient regions cannot effectively utilize manure and it is often a costly disposal problem
- The cost to transport corn from the Midwest to deficient regions increases

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Food in America

- Plentiful
- Cheap
- High quality
- Variety
- A good model

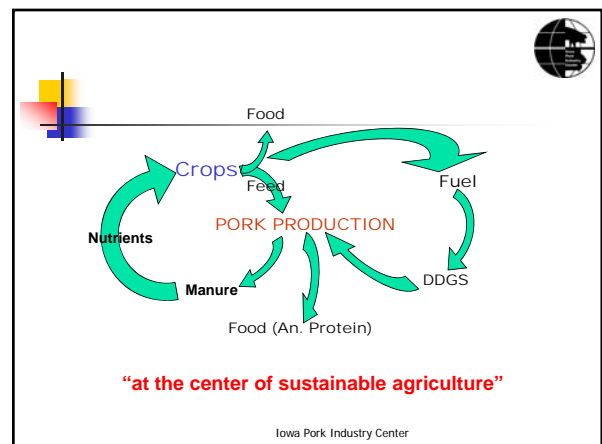


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Sustainability of Food Systems

- Sustainable
 - Ability to provide people high quality food in an affordable manner
- Challenges
 - Population is growing worldwide
 - Affluence is growing worldwide
- Focus → production of high quality pork using available resources in the most cost efficient manner

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Important Issues in Iowa

- There is a need to grow the rural economies of Iowa
- Growth needs to be sustainable
 - Environmental
 - Social
 - Economic

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Important Issues in Iowa

- Growth needs to be diverse
 - Agriculture, manufacturing, construction, transportation, public services (financial, education, utilities, etc), retail marketing, tourism, technology, energy, etc.
- Key = PEOPLE
- For people to stay in rural areas there needs to be jobs and quality of life

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Important Issues in Iowa

- The need to keep more of our young people in rural Iowa is a priority
- Primary usage for rural Iowa land will be agronomic
 - Crop production (corn, soybean, others)
- An integrated crop/livestock industry has great potential to grow Iowa's rural economies in a **sustainable** way!

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Sustainability Factors

- **Economic sustainability** requires adequate size, good management and technology utilization
- Key factor for both **environmental and social sustainability** appears to be the size of the operation and location
- Therefore, growth in the commodity side of pork production must be done via "**Low Density**" model

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"Low Density"

- Match the *nutrient needs of the land* with the *manure production* of the farm
- Consider the impact of the farm on the rural infrastructure
- Consider the profit potential to create rural jobs
- Site the farm using objective assessments of environmental risk

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2400 Head Wean-Finisher on 640 Acres of Cropland



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2400 Head Finisher Example

- One 2400 finisher on one section of land with an approved MMP
- Nutrient needs of the land match the manure production of the pigs
- Reduce the use of rural roads for manure transport
- Locate only on sites that are objectively identified as environmentally acceptable

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Economic Impact Includes

- Job creation to manage the farm
 - **New beginning farmers**
- Feed utilization of the pigs
 - **Local grains, local processing**
- Veterinary care (local practitioners)
- Utilities (regional suppliers)
- Insurance (local businesses)
- Taxes (local and state)

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Summary

- Iowa is a state blessed with fertile land to grow abundant, high quality crops
- Pork production is essential to maintain profitable crop industries in Iowa
- Energy prices have risen dramatically, and will continue
- Iowa's advantage for pork production will continue
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Summary

- Iowa is a state blessed with fertile land to grow abundant, high quality crops
- Pork production is essential to maintain profitable crop industries in Iowa
- Energy prices have risen dramatically, and will continue
- Iowa's advantage for pork production will continue
- *Integrated crop/livestock industries are essential to the survival of rural Iowa*

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Thank You For Your Attention



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