Future of the Agricultural Sector:
Purdue Extension and Financial

Jason Henderson, Ph.D.
Director of Purdue Extension

July 7, 2015
Community Forums: Spring 2015

- Nearly 800 attendees
- 21 Community Forums
- 6 Dean’s Listening Sessions

Proposed Forum Invitees

- Business & Industry
- Local & Regional Governments
- Educational Leaders
- Nonprofit & Voluntary (Civic) Groups
- Local Residents, including underserved groups
- Faith-Based Groups
- Community Foundation
- State & Federal reps.
- Extension stakeholders
- Extension stakeholders

2015 Community Forums

Purdue University Cooperative Extension Service is an equal access/equal opportunity institution.
# Communicating Results

## Children, Youth & Family

### Two Powerful, Overarching Themes Emerged

1. **Education for all ages**
2. **Enhancing the quality of life**

### Education for all ages

- Teach young about the importance of education and the value of work ethic.
- Provide education in a wide range of parenting skills, including:
  - Strong family communication
  - Help to achieve children's and family goals
  - Childcare
  - Budgeting for healthy home nutrition
  - Know the health and safety role model

### Enhancing the quality of life

- **Promoting Healthy Living**
  - Reinforce the importance of health and nutrition through education that addresses:
    - Physical activity
    - Physical health
    - Mental health
    - The importance of hygiene

- **Enhancing Positive Life Skills**
  - Provide education that facilitates:
    - Conflict resolution
    - Respect
    - Decision-making
    - Strong work ethic
    - The importance of leadership
    - Risk and responsibility
    - Independence

## Community, Economy, Agriculture & Natural Resources

### Top Five Priority Issues & Action Items

#### Strengthening Workforce, Business, and Economic Development
- Convene a forum to discuss economic development.
- Enhance rural skills through workshops and seminars.
- Strengthen the local workforce by providing opportunities for workforce development and entrepreneurship.

#### Expanding Agriculture-Related Opportunities
- Create programs that help improve the public perception of agriculture.
- Expand opportunities in diversified agriculture, such as sustainability, new crops, urban agriculture, local food systems, small farms, beginning farmers, and small-scale vegetable production.
- Continue and expand farm succession planning efforts.

#### Fostering Responsible Land Use and Conservation of Resources
- Improve education in land use regulations and endowments to enhance community understanding.
- Increase awareness of natural resources and how they relate to conservation and the environment.
- Create programs to help maintain or improve soil health and the quality and availability of water resources.

#### Creating Quality Communities
- Design and deliver educational programs that emphasize the importance of quality places.
- Focus on necessary infrastructure for quality places, such as trails, recreation, healthcare, schools, and policy options.

#### Increasing Civic Participation and Local Government Education
- Build strong partnerships to advance civic engagement, community pride, community collaboration, and leadership development.
- Offer educational programs that address property taxes, government regulations, and government finances.

## Purdue Extension Activities / Initiatives to Consider

- Establish new programs — or strengthen existing programs — to encourage learning, intervention, opportunities, and role modeling.
- Create a series of classes, workshops, or other educational initiative to specifically address these issues — whether at group or individual levels of instruction.
- Actively work with community partners and agencies, businesses, educational institutions, and nonprofit organizations to bring communities together and make programs available to all residents of them.
- Encourage and equip residents with skills and techniques so they can advocate for systems or policy changes within their communities.

- Enhance marketing and communications efforts so the public is aware of new or existing programs.
- Focus on the needs of small communities who need to access resources (e.g., grant-writing programs).
- Create tools that address issues such as economic development and understanding.
- Partner with agencies, businesses, educational institutions, and nonprofit organizations.
- Encourage networking and connecting people to resources and information.
- Engage social media presence to connect more consistently, naturally, and effectively with audiences.
- Establish community forums to encourage public dialogue on these issues.
- Leverage existing Extension programs (e.g., Materials Management) in new ways that address these issues.
- Promote and market new and existing programs at both agri-food and public events.
- Leverage Purdue University’s colleges of Agriculture, Health Sciences, and Veterinary Medicine to connect more broadly — and authentically — with local and regional partners.

---

Purdue University Cooperative Extension Service is an equal access/equal opportunity institution.
The Future of Purdue Extension: Integration

- How do we strengthen integration of Extension?
  - The original land grant mission

- Integration with other College missions
  - Research: Discovery with impact
  - Teaching: Co-curricular activities

- Integration with other colleges: nursing & engineering
- Integration of campus and county
- Integration of community partners

**NEED STRONGER COLLABORATIONS DURING INITIAL STAGES OF DEVELOPMENT**
The Future of Purdue Extension

- Integration with other College missions
- Workforce for Extension
  - Salary challenges
  - Work/life balance
  - Master’s requirement
  - Timing of hiring

County Openings February 2015
The Future of Purdue Extension

- Integration
- Workforce for Extension
- Reporting and Communication

- Purdue Extension needs to tell its story better
- We need different metrics
- We need stronger impacts and evaluation
- We need soundbites

Did You Know?
“What is your bumper sticker?”
Comment from participant at Hendricks County listening session, Spring 2015
Agriculture is Facing
An Opportunity of a Lifetime, But ....

How does this Farm Boom End?
A Century of Farm Booms

U.S. Corn Prices and Farm Real Estate Values

Dollars per acre (Constant 2012 dollars)

U.S. Farm Real Estate Values (Left Scale)
Corn Price - 5 year average (Right Scale)

Source: USDA
Today’s Challenge: Shrinking the Balance Sheet

Federal Reserve System Balance Sheet: Assets

Billions of dollars

Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15

Fed Agency Debt MBS
Liquidity to Key Credit Markets
Lending to Financial Institutions
Long-Term Treasuries
Traditional Security Holdings

Source: Federal Reserve Bank of Cleveland
What Leads to Higher Interest Rates?

**INFLATION**

• Drivers of Inflation
  – Cost-push: Will retirement of boomers push up wages?
  – Demand-pull:
    • How will Millennials and Boomers spend money?
    • Where will international growth emerge?
Worker Compensation is on the Rise.

Employment Cost Index: Private Industry Workers

Percent change from previous year

Source: Federal Reserve database (FRED)
Home Prices will Shape Inflation

U.S. Home Prices

Percent change from previous year

Source: FHFA and Case-Shiller
Demographics are a Major Driver.

U.S. Population Growth

Annual percent change

Calculations based on Census data

25-44 year olds
45-64 year olds

Purdue University Cooperative Extension Service is an equal access/equal opportunity institution.
World Growth: Where is the Next China?

World GDP Growth

Percent change from previous year

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2015</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Income Countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing Countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle East</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: World Bank
The Monetary Policy Environment is Shifting

- The Federal Reserve indicates that rates could rise in 2015
- In the long run, normalization would add 3 basis points to interest rates?
- Will interest rates simply rise to long run norms, or will they rise higher before settling back to long run norms?
- How would a 3 to 4 percent increase in rates affect the financial health of your customers?
The Stages of Farm Investment

- Land Investments
- Equipment Investments
- Lifestyle Investments
Farmland Values Dip in 2015.

Indiana Farmland Values – Good Quality Land

Percent change from prior year

Source: Federal Reserve Bank of Chicago
Farm equipment sales begin to fall, but remain historically high

Through May 2015, combine sales are down 39% and tractor sales plummeted 47% below 2014 levels

U.S. Tractor and Combine Sales

Thousands of Unit Sales

Source: Association of Equipment Manufacturers
* Estimated based on sales through May 2015
Family Living Expenses Have Increased Substantially

Source: Compiled from Kansas Farm Management Association Executive Summaries
How Strong are Farm Finances?

Farm Debt Outstanding at Commercial Banks

Percent change from previous year

Source: FDIC, Call Report data
What is the Future of Farm Finances?

Credit Conditions in Tenth Federal Reserve District

Source: Federal Reserve Bank of Kansas City
What do we know about age demographics?

- Farm owner’s are getting older.
- So are small business owners.

![Graph showing age distribution of business owners and employees, 2013](chart)

**Distribution of Primary Farm Operator Age**

- Under 35: Owners 15.6%, Employees 38.3%
- 35 to 49: Owners 32.7%, Employees 32.3%
- 50 to 88: Owners 51.7%, Employees 29.3%

**Source:** SBA
Not surprisingly, experienced farmers own more of the farmland.
But, they are also renting more land.
Management of Boomers vs Gen X vs Millennials

- How do they use information?
- Where do they get their information?
- How do they communicate with you?
Conclusion

• Low interest rates typically benefit debtors, not creditor.
• Inflation tends to benefit debtors, not creditors.

What are farmers? Asset rich, cash poor.

• But ...

• Rising inflation will ultimately trigger higher interest rates and a new stage in agricultural cycles.
• Is agriculture prepared for this stage of the ag cycle?
• Will it have the liquidity it needs?
Additional Resources to Follow

1) Federal Reserve System:
   http://www.federalreserve.gov/monetarypolicy/
   - FOMC Policy Normalization Principles and Plans
   - FOMC Longer-Run Goals and Monetary Policy Strategy
   - Recent FOMC statements, especially projection materials

2) Federal Reserve Bank of Kansas City
   https://www.kansascityfed.org/research/agriculture
   - Ag Credit Survey (Tenth Federal Reserve District)
   - Agricultural Finance Databook (National information)

3) World Bank: Prospects
   http://worldbank.org/
   Home>Data & Research>Prospects