Overview & Assessment of U.S. Soybean Processing Industry
USSEC U.S. Soy Supply Workshops

Thomas Hammer, President
National Oilseed Processors Association
Jakarta & Surabaya, Indonesia
May 14-20, 2017
NOPA Members

• 13 NOPA member companies

• Account for approximately 94% of US soybean crush

• Operate 64 processing plants in 20 states, including 58 that process soybeans

• Crush 1.77 billion bushels, comprising over 45% of U.S. soybean farmers’ production in 2015/16
NOPA Membership

• Ag Processing Inc.
• Archer Daniels Midland Company
• Bunge North America
• Cargill, Incorporated
• CHS
• Consolidated Grain and Barge Company

• Express Grain Terminal
• Incobrasa Industries, Ltd.
• Louis Dreyfus Commodities
• Owensboro Grain Company
• Perdue Grain & Oilseed, LLC
• Riceland Foods, Inc.
• Zeeland Farm Soya
NOPA’s Members Produce: Food, Feed & Fuel

Soybean Components

- **80%** Oil
- **20%** Meal

**Soybean Meal:**
- 97% used to feed poultry & livestock
- 3% used in food products like protein alternatives & soy milk

**Soybean Oil:**
- 68% used for frying and baking food, as a vegetable oil & as an ingredient if foods like salad dressings & margarines
- 25% used for biodiesel and bioheat
- 7% is converted into industrial used like paints, plastics and cleaners

*Source: United Soybean Board*
NOPA’s Vision...

“NOPA favors a market-based trading environment that encourages the efficient production of an abundant, safe, sustainable and high-quality supply of oilseeds and oilseeds products for domestic and world consumers of food, feed-ingredients and renewable fuels.”
Critical Challenges facing the U.S. Oilseed Crushing Industry

- Promote Healthy Crushing Industry
  - “Tough but Fair” Regulations
  - Fair & Open Trading System
  - Maintain/Expand Markets for Soybean Products
  - “Responsible Use” of Biotechnology

- Promote Healthy Livestock Industry
  - User-Friendly Operating Environment
  - Expand Domestic & International Markets

- Promote Healthy Oilseed Producer Industry
  - Market-Oriented Farm Programs
  - Risk Management & Insurance Programs
  - Adequate Funds for Research & Market Development
Critical Challenges Facing the U.S. Oilseed Crushing Industry (cont.)

- U.S. animal agriculture faces significant challenges
  - Water & Air pollution issues from livestock manure
  - Animal welfare issues related to certain management practices
  - Animal identification & traceability systems – disease & biosecurity
  - Legal uncertainty with immigration & farm labor issues
  - **Perhaps, the biggest challenge facing animal agriculture will be to meet the increased food needs of a growing global population.**

- Federal over-regulation of U.S. Manufacturing Industries
  - Cost of all federal government regulations, including: Economic, Environmental, Food & Drug, Tax Compliance & Occupational Safety, Health & Homeland Security regulations) cost U.S. Manufacturers an estimated $2.028 trillion in 2012 -12% of U.S. GNP, or just less than $10,000 per employee per year.
  - **Many federal regulations should be subjected to a “benefit-cost” analysis to ensure that they are both “fair & reasonable”**.
Demagoguery on “International Trade” by Politicians & Pundits

- Intellectual consensus does exist for mutually-beneficial free trade.
- But, all final 2016 presidential candidates, including Donald Trump, Hillary Clinton & Bernie Sanders made global trade a “lightening rod.”
- While many politicians rail against unfair trade agreements & unlevel-playing fields on the “election stump” – they do change their tune after taking the Presidential oath - every President since Franklin Roosevelt, regardless of political party, has embraced and even promoted trade liberalization.

Absence of science-based conversations on agricultural biotechnology by the vocal minority of opponents.

- Must confront the lack of intellectual honesty over foods containing GMOs.
- A very strong messages can be delivered about food biotech.
- Over last 15 years, not one concern about food safety, environmental impact or the lack of either sound science and rigorous regulations can be substantiated.
- **Biotech is key to ensuring a safe & abundant food supply to meet the needs of the world’s growing population.**
Donald Trump’s Contract with the American Voter

• “Seven actions to Protect American workers:
  • First, I will announce my intention to renegotiate NAFTA or withdraw from the deal under Article 2205.
  • Second, I will announce our withdrawal from the Trans-Pacific Partnership.
  • Third, I will direct the secretary of the Treasury to label China a currency manipulator....”
What has President Trump done on these issues in his first 100 days?

- **Trans-Pacific Trade Agreement (TPP)**
  - On January 23, 2017, President Trump signed executive order withdrawing the U.S. from the TPP.
  - President Trump has voiced his preference for bilateral trade agreements over regional trade agreements.
  - High-level meetings are taking place between the U.S. & Japan to explore a broad economic & strategic bilateral agreement.

- **North American Free Trade Agreement (NAFTA)**
  - On April 26, 2017, President Trump announced that he had agreed with President Pena Nieto of Mexico & Prime Minister Trudeau of Canada not to terminate the NAFTA.
  - The 3 state leaders agreed to proceed swiftly, according to their required internal procedures, to enable the renegotiation of the NAFTA to the “benefit of all three countries.”
  - Trump wants to bring the NAFTA “up to date” thorough negotiation.
What has President Trump done on these issues in his first 100 days (cont.)?

- Label China a “Currency Manipulator”
  - On April 16, 2017, President Trump stated that he would not label China a currency manipulator.
  - When questioned about his reversal on this campaign promise, Trump stated “Why would I call China a currency manipulator when they are working with us on the North Korean problem? We will see what happens!”

Conclusions:

- It is far too early in the Trump Presidency to make predictions about his overall trade agenda.
- But, it appears that he is willing to adjust his positions based upon the “facts” and recommendations from his policy team (which is still not in place after 100 days!)
NOPA Soybean Crush
CY2013-2017 (000Bu.)
NOPA Soybean Meal Exports
CY2013- 2017(tons)
U.S. Soymeal Usage by Livestock (FY2015)

- **POULTRY**: 16.3 Million Metric Tons
- **SWINE**: 6.9 Million Metric Tons
- **BEEF**: 3.5 Million Metric Tons
- **DAIRY**: 2.1 Million Metric Tons
- **PET FOOD**: 0.6 Million Metric Ton
- **OTHER FEED**: 0.67 Million Metric Tons
- **TOTAL**: 30.2 Million Metric Tons

Source: Based on industry estimates, USB 2008 soymeal market study, USDA (NASS)
U.S. Vegetable Oil Consumption (2015)

Soybean: 8.9
Rapeseed/Canola: 2.2
Corn: 1.7
Palm: 1.2
Coconut: 0.5
Other*: 1.3
Total: 15.7

*Other includes: palm kernel, peanut, sunflower, safflower and others

Source: ERS, USDA
U.S. Soybean Production
2000 – 2015 and USDA Forecast for 2016

MMT

75.1 78.7 75.0 85.0 83.5 87.0 72.9 80.7 91.4 90.6 84.2 82.6 91.4 106.9 106.9 117.2
U.S. Combined Exports of Soybeans, Soymeal & Soyoil
2000/01 – 2015/16 and USDA Forecast for 2016/17
Exploding World Population – very good for Global Protein Industry
Emerging Middle Class will be “Engine Room” for Future Global Development

- Middle classes are rapidly expanding in emerging & developing countries.
- In richer countries, the middle class is shrinking & feels incapable of defending the standard of living that it has enjoyed for centuries.
- Today, both of these middle classes are awakening!
- **Key question for the future:** Which middle class will become the real “agents of change”?

Source: OECD Development Center
World Population Centers Changing – Will Provide New Market Opportunities

Sources: UN; The Economist

* Did not exist as countries in 1950. Historical estimates made using modern borders
U.S. Agriculture Exports to S.E. Asia Region -- Up Sharply in Recent Years

Growth in U.S. Agricultural Exports to Southeast Asia

Largest Markets for U.S. Agriculture in Southeast Asia
With Percentage Increase Over Past 5 years

Source: FAS GATS

Source: FAS/GATS
Global Soybean Consumption 2000/01 – 2016/17 and Trend to 2026/27

If Trend Continues World Will Need 80 MMT Additional Soybeans in a Decade
U.S. Soy Crush Capacity Is Expanding To Meet Increasing Global Demand

- **Perdue Agribusiness:**
  - Location: Conoy Township, PA
  - Expected Completion: 2017

- **Ag Processing Inc:**
  - Location: Aberdeen, SD
  - Expected Completion: 2019

- **Bunge NA:**
  - Location: Ohio or Indiana
  - Expected Completion: 2019
U.S. Soy Crush Capacity Is Expanding To Meet Increasing Global Demand (cont.)

▶ Zeeland Farm Services:
  ▪ Location: Ithaca, MI
  ▪ Expected Completion: Late 2018 or 2019

▶ MnSP & NDSP:
  • Location: Spiritwood, ND
  • Expected Completion: 2018

▶ Others??
World’s Largest Soybean Importers Forecast for 2016/17 Marketing Year

Source: John C. Baize and Associates
World’s Largest Soybean Meal Importers Forecast for 2016/17 Marketing Year

- European Union: 19.50 MMT
- Vietnam: 5.15 MMT
- Indonesia: 4.60 MMT
- Thailand: 3.00 MMT
- Philippines: 2.65 MMT
- Mexico: 2.40 MMT
- Korea, South: 1.95 MMT
- Japan: 1.80 MMT
- Malaysia: 1.58 MMT
- Iran: 1.55 MMT
- Algeria: 1.50 MMT
- Peru: 1.33 MMT
- Colombia: 1.27 MMT
- Egypt: 1.20 MMT

Source: John C. Baize and Associates
# Top 10 Destinations for U.S. Soybean Exports
Jan-Dec 2016

<table>
<thead>
<tr>
<th>Export Markets</th>
<th>2016 Rank</th>
<th>Value</th>
<th>Quantity (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1</td>
<td>$14,204,236</td>
<td>35,848,523</td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
<td>$1,462,600</td>
<td>3,639,647</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>$1,000,738</td>
<td>2,360,086</td>
</tr>
<tr>
<td><strong>Indonesia</strong></td>
<td>4</td>
<td><strong>$992,552</strong></td>
<td>2,574,699</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5</td>
<td>$785,693</td>
<td>1,961,397</td>
</tr>
<tr>
<td>Taiwan</td>
<td>6</td>
<td>$585,558</td>
<td>1,518,637</td>
</tr>
<tr>
<td>Germany</td>
<td>7</td>
<td>$437,450</td>
<td>1,193,065</td>
</tr>
<tr>
<td>Thailand</td>
<td>8</td>
<td>$364,190</td>
<td>908,865</td>
</tr>
<tr>
<td>Spain</td>
<td>9</td>
<td>$352,507</td>
<td>895,232</td>
</tr>
<tr>
<td>Vietnam</td>
<td>10</td>
<td>$347,596</td>
<td>859,957</td>
</tr>
<tr>
<td><strong>Total Exports (Top Ten)</strong></td>
<td>----</td>
<td><strong>$20,533,120</strong></td>
<td>51,760,108</td>
</tr>
<tr>
<td><strong>Total Exports (All Countries)</strong></td>
<td>----</td>
<td><strong>$22,867,416</strong></td>
<td>57,650,854</td>
</tr>
</tbody>
</table>

Source: USDA/FAS/Data 3-17-2017
Top Ten Reasons to Buy U.S. Soy

1. Nutritional Value Proposition
2. Availability of Supply
3. Reliability of Product
4. Hedgeability
5. Transportation Diversity
6. Consistency of Product
7. Quality/Claims Process
8. Sustainable Production
9. Market-Driven Policies
10. **US Soybean Industry Support**
Sustainability = Opportunity

- **Do the right thing:** This is closely aligned with NOPA’s Vision Statement.

- **Become the supplier of first choice:** Our domestic and foreign customers and their consumers are increasingly concerned about sustainability. Our members must aim to become “the most trusted suppliers of sustainable soybean products.”

- **Grow our global business:** The growing importance of sustainability gives us opportunities to innovate, rethink how we do business & grow our business for soy and soy-based products in new directions.
U.S. Soy Processors Work Hard to Protect & Promote Our Global Supply Chains!

• U.S. soybeans, meal & oil are the **most sustainable** in the world.

• U.S. laws & regulations governing farmers, grain handlers, processors & exporters are the **most rigorous** in the world.

• US soy & soy products are the **best overall value** for our global customers.
USSEC’s Staff are the U.S. Soy Value Chain’s Boots on the Ground

- NOPA members export soybean meal and soy oil to our global customers.
- NOPA has a dynamic partnership with USSEC
- USSEC is our trusted partner, providing our global customers with support, technical services and market access support through a network of six regions in more than 70 countries.
Contact Information:

National Oilseed Processors Association
1300 L Street, NW
Suite 1020
Washington, DC 20005
USA
Phone: 202.842.0463
Website: www.nopa.org