The Changing Chinese and World Consumer: Creating Shared Value and Future Impacts
950 babies will be born in China

827 babies will be born in India

221 babies will be born in the U.S.
In the 20th Century, the World Population Tripled
Global Challenges, Global Opportunities

In **50** years, the world population will require...

**100%** more *food*, and...

**70%** of this food must come from efficiency-improving technology.
A Dynamic & Changing World: Population

source: UN
Growth of Middle Class
Growth of Middle Class
Economic Growth in China
Agricultural Impacts
Effects of Urbanization
Over the Next 10 Years

- China GDP will grow 7.9%
- United States GDP will grow 2.8%
- Germany GDP will grow 1.7%
Filling the Productivity Gap

- Annual productivity growth needed to double output
- Annual current productivity growth

Source: Farm Foundation, NFP calculations (2010) based on USDA ERS data.
The First Green Revolution

“To feed our growing global population, we will have to produce the same amount of food in the next 40 years that we previously produced in the last 10,000 years.”

-Norman Borlaug
Information Technology in Agriculture

- Improved crop management – satellite and GPS
- Improved access to market information – mobile phones
- Improved supply chain efficiencies – satellite and remote monitoring technologies
How to Meet Consumption Demands

- Improved Technology
- Improved Nutrition
- Improved Management

While delivering the highest level of food safety
We are Facing Complex Questions & Issues

**Food Safety/Food Security**
- Disease Prevention & Control
- Traceability
- Shortage

**Animal Well-Being**
- Optimized Health
- Proper Care-Caged, not caged, Free Range

**Production**
- Organic/Natural/Conventional
- Waste Reduction

**Environment**
- Best Management Practices
- Land Availability/Urbanization
- Water

**Improvements in Information Technology**
Tremendous Genetic Evolution

- **Year : 1957**
  - Time to Market: 120 days
  - Average Weight: 1.4 kgs
  - Average Conversion: >3

- **Year : 2001**
  - Time to Market: 42 days
  - Average Weight: 2.6 kgs
  - Average Conversion: 1.7

- **Year : 2030**
  - Time to Market: 38 days
  - Average Weight: 3.5 kgs
  - Average Conversion: 1.5

Differences in Dairy Productivity

- **Total Production (Thousands)**
- **Production Per Cow**
- **Number of Cows (Thousands)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Production</th>
<th>Production Per Cow</th>
<th>Number of Cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
<td></td>
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<tr>
<td>Mexico</td>
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<tr>
<td>United States</td>
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</tbody>
</table>
The Novus Story

• Born in 1991 out of the scientific heritage of Monsanto

• Growing under Mitsui and Co, (USA) Inc. and Nippon Soda Co, Ltd.

• Multiple product families based on science

• Portfolio leveraged across multiple species in global markets

• Programs designed to address customer ROI and challenges
Our Global Footprint
<table>
<thead>
<tr>
<th><strong>Our Mission, Vision &amp; Core Values</strong></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Vision</strong></th>
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<tbody>
<tr>
<td>To help feed the world affordable, wholesome food and achieve a higher quality of life.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Mission</strong></th>
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<tbody>
<tr>
<td>Make a clear difference in sustainably meeting the growing global needs for nutrition and health.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Core Values</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximize Long-Term Customer Satisfaction</td>
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<tr>
<td>Provide Products with Demonstrable Value</td>
</tr>
<tr>
<td>Act with Integrity</td>
</tr>
<tr>
<td>Protect Our Employees, the Public and the Environment</td>
</tr>
<tr>
<td>Seek Excellence from all Employees</td>
</tr>
</tbody>
</table>
Evolution: Markets and Product Family

<table>
<thead>
<tr>
<th>Organizational Infrastructure</th>
<th>Global Expansion</th>
<th>Markets</th>
<th>Programs</th>
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</thead>
<tbody>
<tr>
<td>Marketing &amp; Sales</td>
<td></td>
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<td>Gut Health</td>
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<tr>
<td>Distribution &amp; Manufacturing</td>
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<td>Nutrition</td>
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<tr>
<td>Research &amp; Development</td>
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<td>Feed Quality</td>
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<tr>
<td>Legal &amp; Regulatory</td>
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</tbody>
</table>
Novus Technologies & Innovations for Sustainable Agriculture

- Efficient Use of Raw Materials and Local Feed Ingredients
  - jatropha
  - cassava
  - sorghum

- Water Quality MERA™ Bac W

- Improved Nutrition alimet®

- Carbon Footprint Benchmarking IEC
Novus Technologies & Innovations for Sustainable Agriculture

- Improved Bioavailability
- Food Safety Improvements
- Enhanced Nutritional Value
Beyond CSR to Creating Shared Value

Triple Bottom Line

Social

Environmental

Economic
Shared Value Defined

What Is Shared Value?

Corporate policies and practices that enhance the competitiveness of a company while simultaneously advancing social and economic conditions in the communities in which it operates.

Create economic value by creating societal value
What’s good for the community is good for business

M.E. Porter, 2011
Shared Value:
Business Success ←→ Social Progress

Economic Value
Profitsability
Revenue
ROI
Industry Growth

Societal Value
Specific societal benefits achieved

Fundamental to shared value is linking economic and social measures
Global Partnerships: Industry Collaboration

Technical

Education

Public opinion
Collaboration Case Study: Alagoas Partnership

- Multi-Sector Partnership in Alagoas, Brazil
- Partners include Globoaves, Sebrae and State University UNEAL
- Enable Families to Build Sustainable Livelihoods and Increase Affordable Food Availability in the Region
### 2012 World Economic Forum: Global Business Policy Risks

<table>
<thead>
<tr>
<th>Global Water Supply Crisis</th>
<th>Agriculture Can Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Fiscal Imbalances</td>
<td>✓</td>
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<tr>
<td>Food Shortage Crisis</td>
<td>✓</td>
</tr>
<tr>
<td>Extreme Volatility in Energy &amp; Agricultural Prices</td>
<td>✓</td>
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<tr>
<td>Rising of Greenhouse Gas Emissions</td>
<td>✓</td>
</tr>
<tr>
<td>Severe Income Disparity</td>
<td>✓</td>
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<tr>
<td>Terrorism</td>
<td>✓</td>
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<tr>
<td>Failure of Climate Change Adaptation</td>
<td>✓</td>
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<tr>
<td>Land and Waterway Use Mismanagement</td>
<td>✓</td>
</tr>
<tr>
<td>Cyber Attacks</td>
<td>✓</td>
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<tr>
<td>Critical Fragile States</td>
<td>✓</td>
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<tr>
<td>Pervasive Entrenched Corruption</td>
<td>✓</td>
</tr>
<tr>
<td>Recurring Liquidity Crises</td>
<td>✓</td>
</tr>
<tr>
<td>Antibiotic Resistant Bacteria (Pandemics)</td>
<td>✓</td>
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</tbody>
</table>

Source: World Economic Forum
Thank You!

Merci
Obrigado
.mulțumesc
Asante sana

धन्यवाद
Благодаря ви

有難う

cảm ơn lắm