



# **The Changing Chinese and World Consumer:** Creating Shared Value and Future Impacts

SOLUTIONS SERVICE SUSTAINABILITY™

**950 babies**  
will be born in China

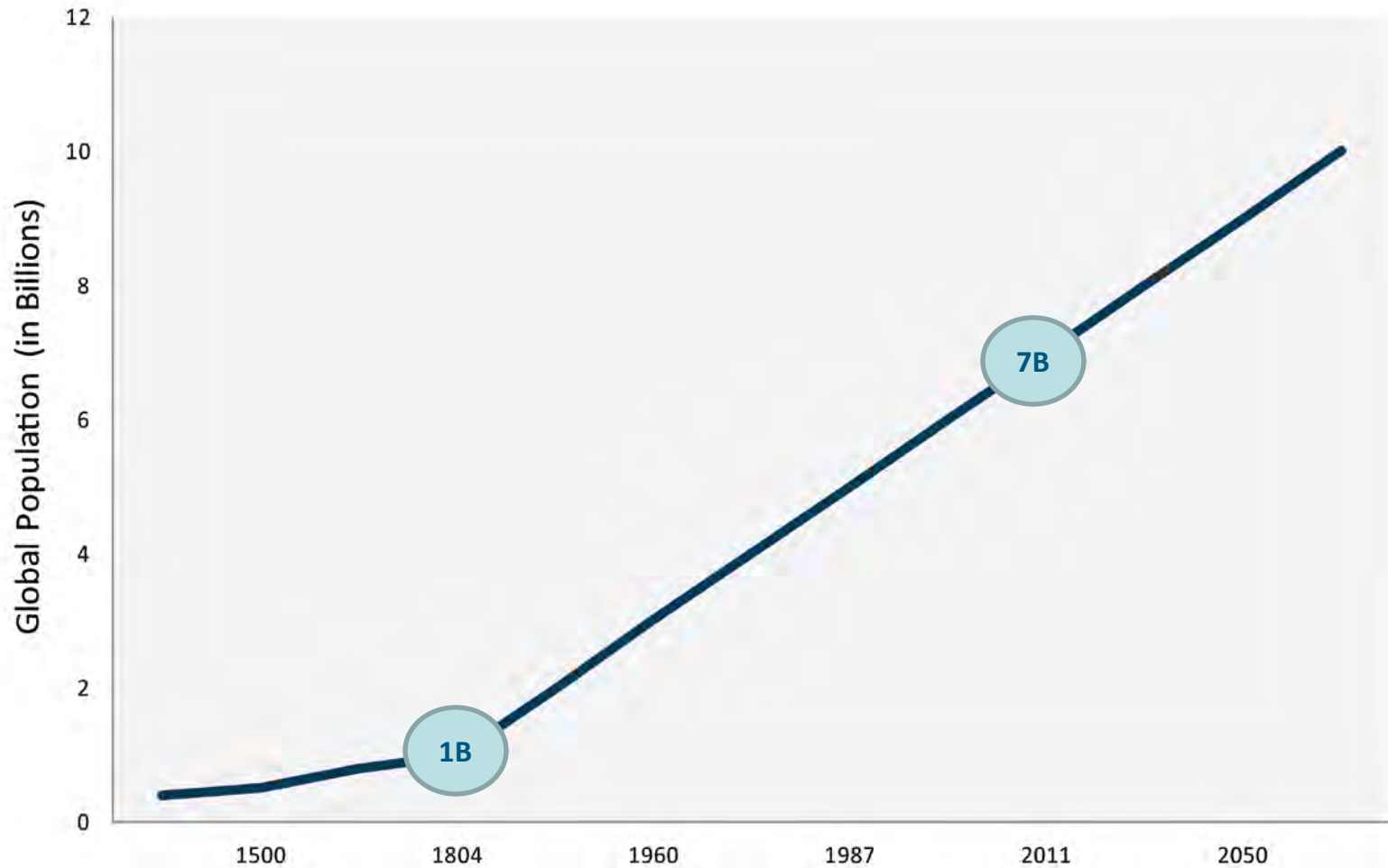
**827 babies**  
will be born in India

**221 babies**  
will be born in the U.S.





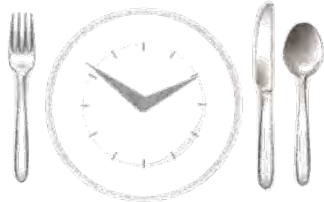
# In the 20th Century, the World Population Tripled



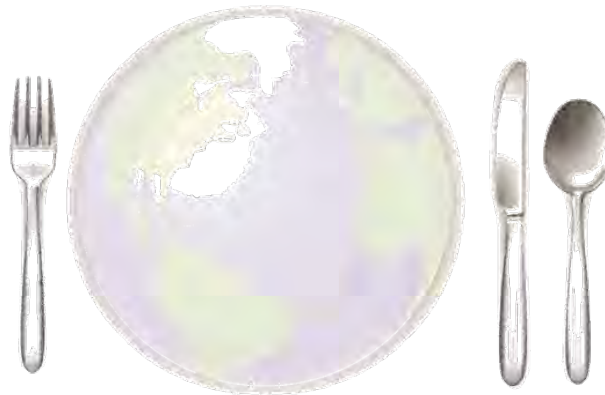
Source: United Nations Population Division



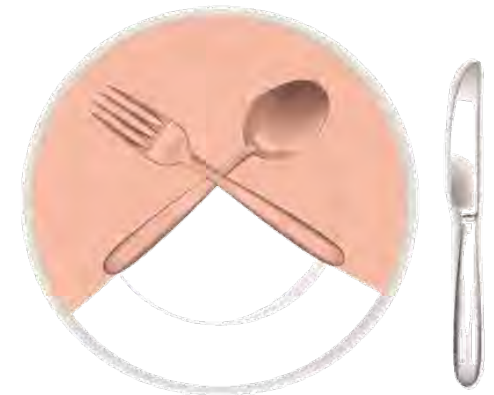
# Global Challenges, Global Opportunities



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



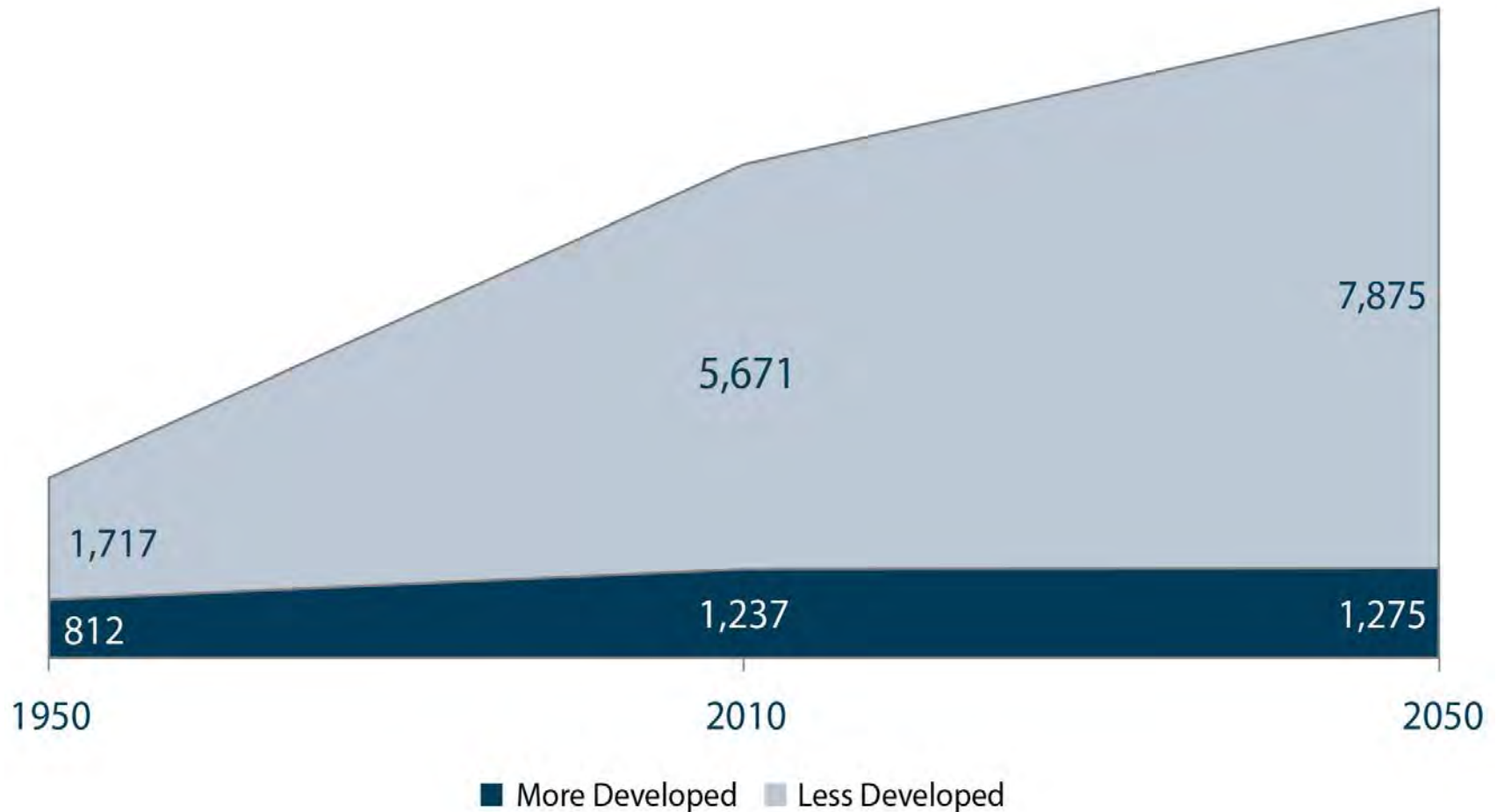
**100%**  
more **food**, and...



**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





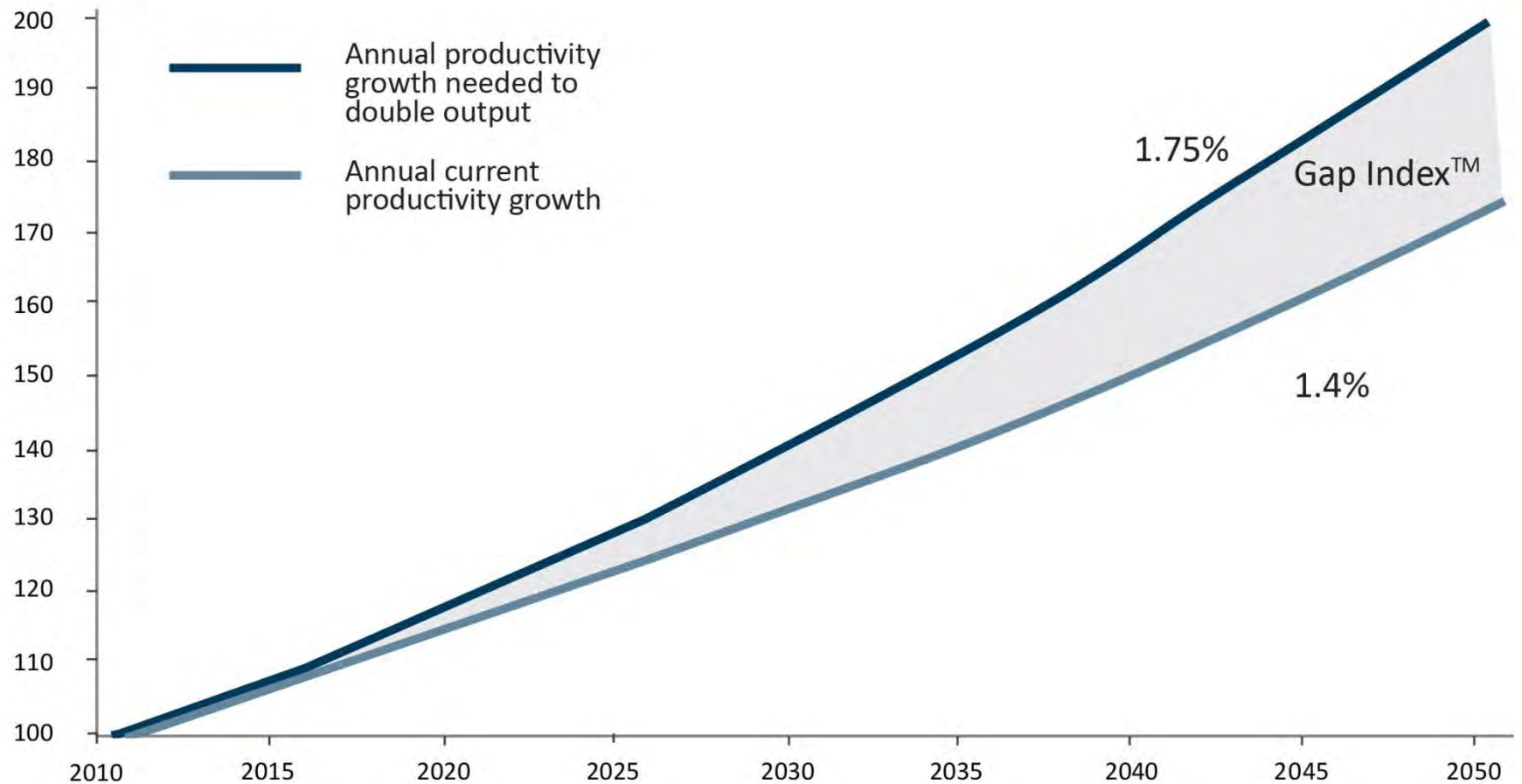
## Over the Next 10 Years



- China GDP will grow 7.9%
- United States GDP will grow 2.8%
- Germany GDP will grow 1.7%



# Filling the Productivity Gap



Source: L 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





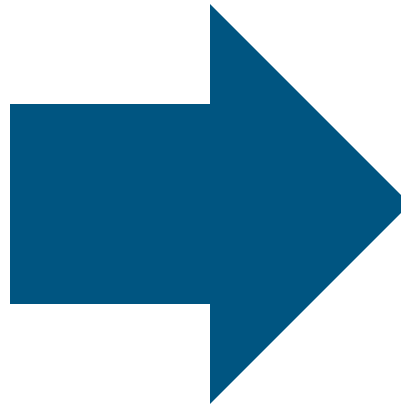
# How to Meet Consumption Demands



**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

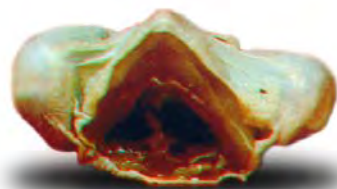
- Organic/Natural/Conventional
- Waste Reduction

## Environment

- Best Management Practices
- Land Availability/Urbanization
- Water



# 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

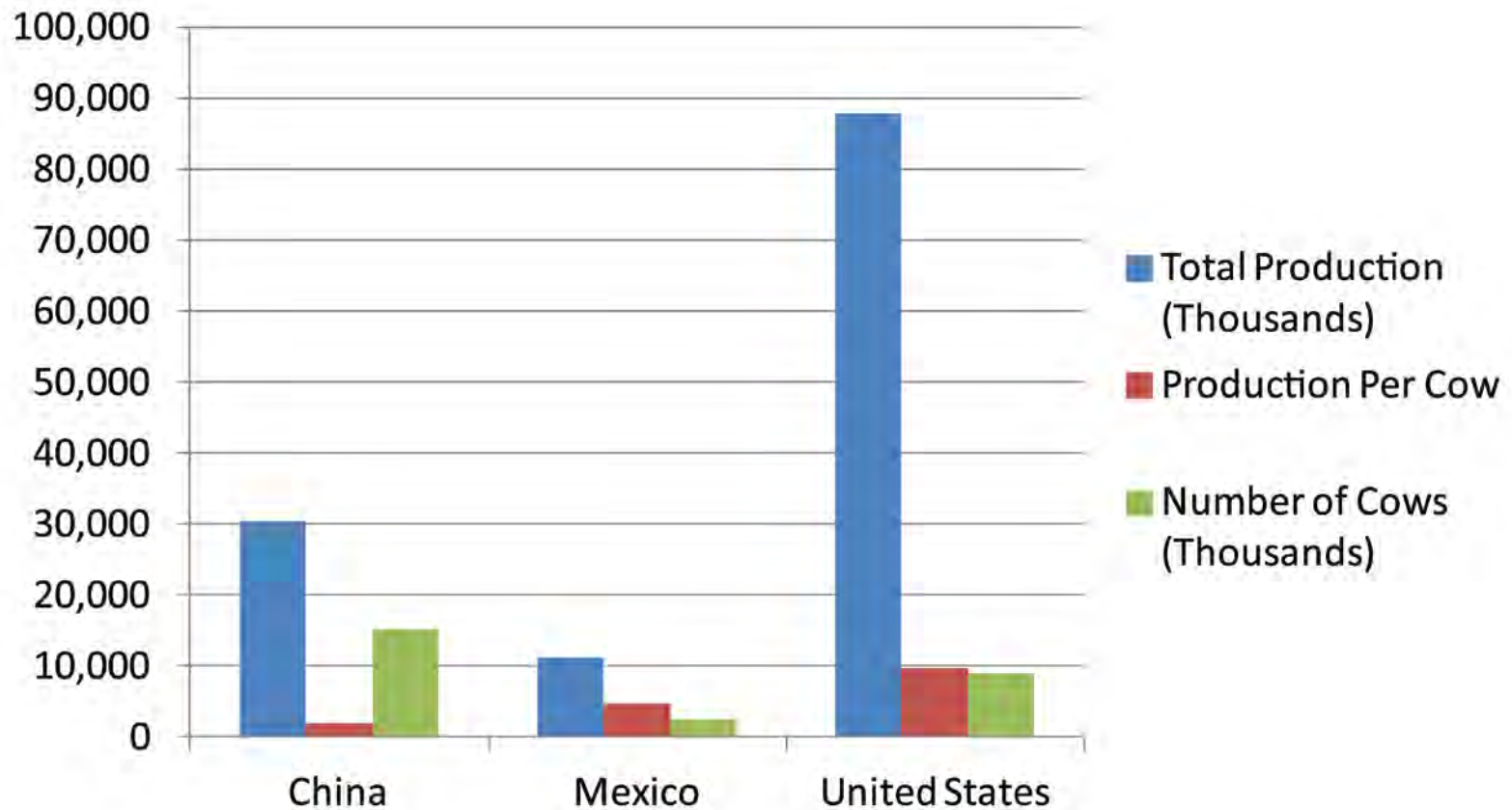
Average Weight: 3.5 kgs

Average Conversion : 1.5

Source: Havenstein, et. al, Journal of Poultry Science 2003 and Novus Analysis



# Differences in Dairy Productivity





# 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





# Our Mission, Vision & Core Values



## Vision

*To help feed the world affordable, wholesome food and achieve a higher quality of life.*

## Mission

*Make a clear difference in sustainably meeting the growing global needs for nutrition and health.*

## Core Values

*Maximize Long-Term Customer Satisfaction*

*Provide Products with Demonstrable Value*

*Act with Integrity*

*Protect Our Employees, the Public  
and the Environment*

*Seek Excellence from all Employees*



# Evolution: Markets and Product Family



## Organizational Infrastructure

Marketing & Sales

Distribution &  
Manufacturing

Research &  
Development

Legal & Regulatory

## Global Expansion



## Markets



## Programs

**Gut Health**

**Nutrition**

**Feed Quality**



# 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





# Novus Technologies & Innovations for Sustainable Agriculture



- Improved Bioavailability

**MINTREX**<sup>®</sup>

- Food Safety Improvements

**SOLIS**<sup>®</sup> **SANTOQUIN**<sup>®</sup>

- Enhanced Nutritional Value

 **stratum**  
NUTRITION<sup>®</sup>  
*A Novus International Business*

 **Arenus**<sup>®</sup>



# Beyond CSR to Creating Shared Value



## Triple Bottom Line



Social



Environmental



Economic



# Shared Value Defined



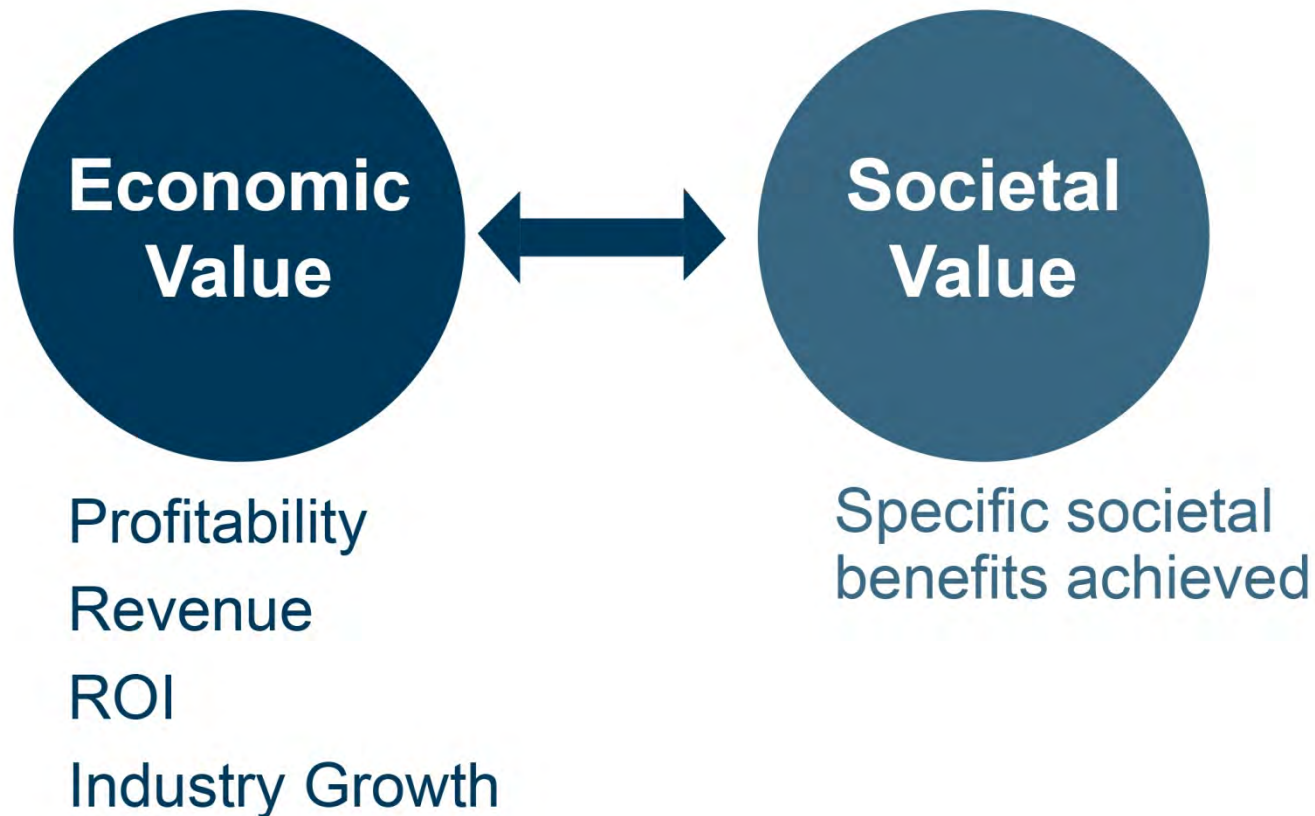
## What Is Shared Value?

**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



# Shared Value: Business Success ↔ Social Progress



Fundamental to shared value is **linking** economic and social measures



# Global Partnerships: Industry Collaboration



## Technical



## Education



Coalition for Sustainable Egg Supply



## 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



WORLD ECONOMIC FORUM	AGRICULTURE CAN HELP
Global Water Supply Crisis	✓
Chronic Fiscal Imbalances	✓
Food Shortage Crisis	✓
Extreme Volatility in Energy & Agricultural Prices	✓
Rising of Greenhouse Gas Emissions	✓
Severe Income Disparity	✓
Terrorism	
Failure of Climate Change Adaptation	✓
Land and Waterway Use Mismanagement	✓
Cyber Attacks	
Critical Fragile States	
Pervasive Entrenched Corruption	
Recurring Liquidity Crises	
Antibiotic Resistant Bacteria (Pandemics)	✓

Source: World Economic Forum



**Thank You!**



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**Merci**

Obrigado

谢谢

धन्यवाद

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Благодаря ви

**Gracias**

有難う

**Asante sana**

cảm ơn lắm