



Industry Outlook

National Grain and Feed Association
Annual Convention, San Francisco

March 19, 2013

Chris Policinski

President and CEO
Land O'Lakes

Agenda

- Land O'Lakes Overview
- Unprecedented Global Growth Opportunity of Agribusiness and Food Production
- Great “Untold Story” of Agricultural Productivity
- Challenges

Land O'Lakes – A Popular View

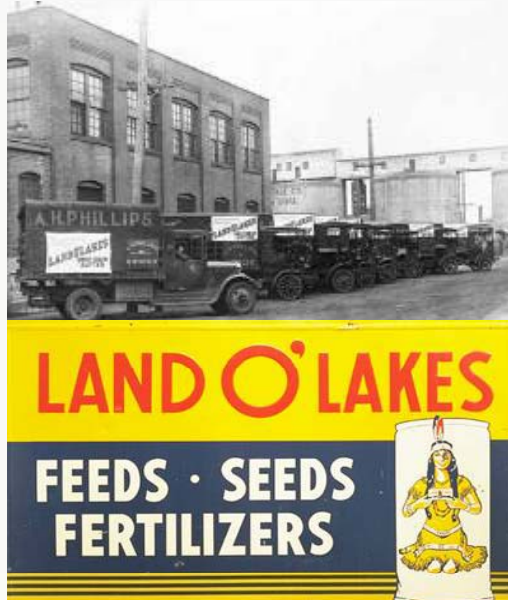


Building Momentum

 LAND O'LAKES, INC.

Land O'Lakes: 92-Year History

Deep Cooperative and Rural Roots



- **Member-owned**
 - Organized in 1921 as a dairy marketing cooperative
- **Expanded into farm inputs**
 - Late 1920s
 - At our members' request

Land O'Lakes Today

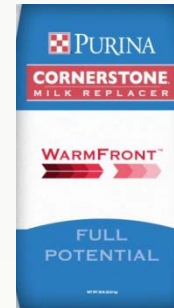
Growing, Diversified Agribusiness Operations



Leading market positions
in butter, deli cheese,
refrigerated desserts



Leader in animal
nutrition, livestock and
lifestyle feed



Leading provider of
agribusiness products,
services, insights
and expertise



Building Momentum

 LAND O'LAKES, INC.

Land O'Lakes

#210 on the Fortune 500



Second largest U.S. Ag Cooperative



Diversified Agribusiness Operations



300+ Facilities



10,000 Employees

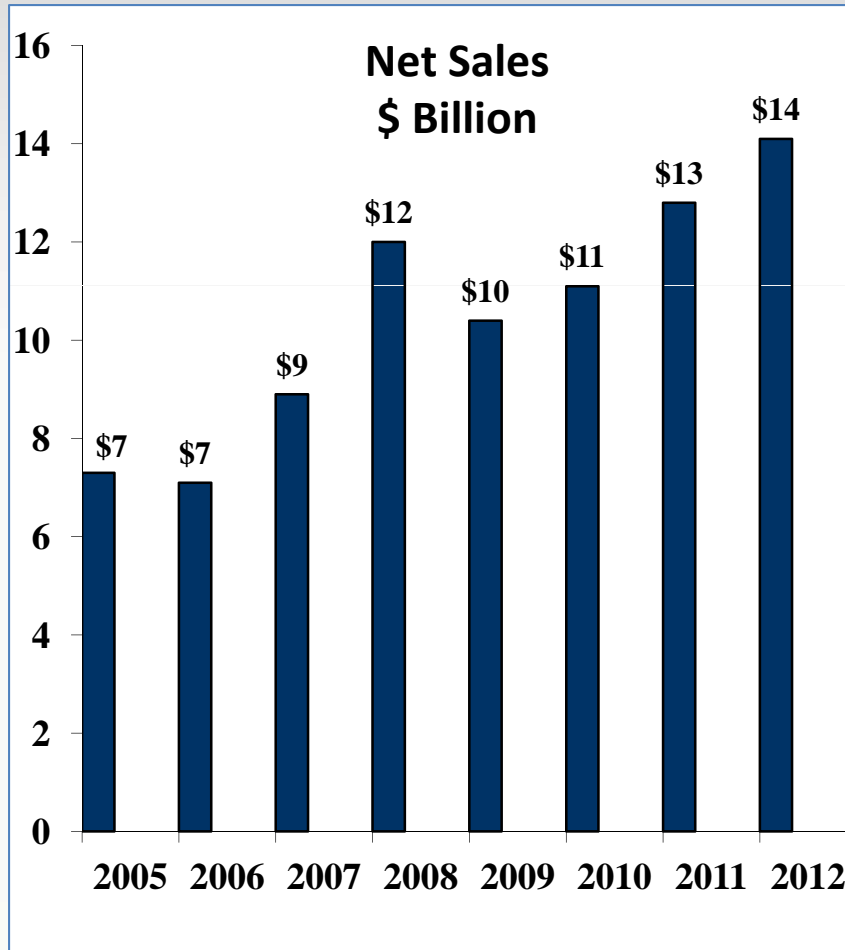


3,000 producer-members

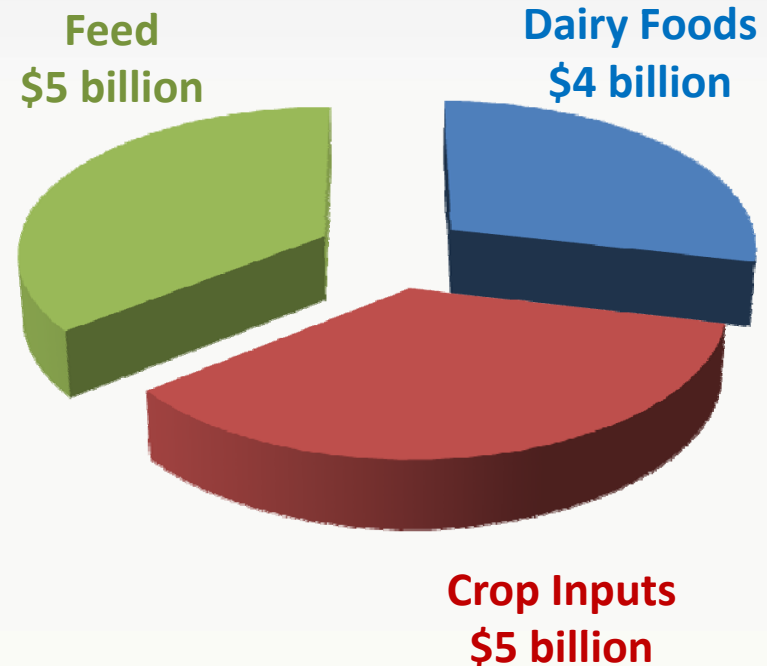


1,000 member co-ops
Serving 300,000 producers

Land O'Lakes Growth Is Accelerating

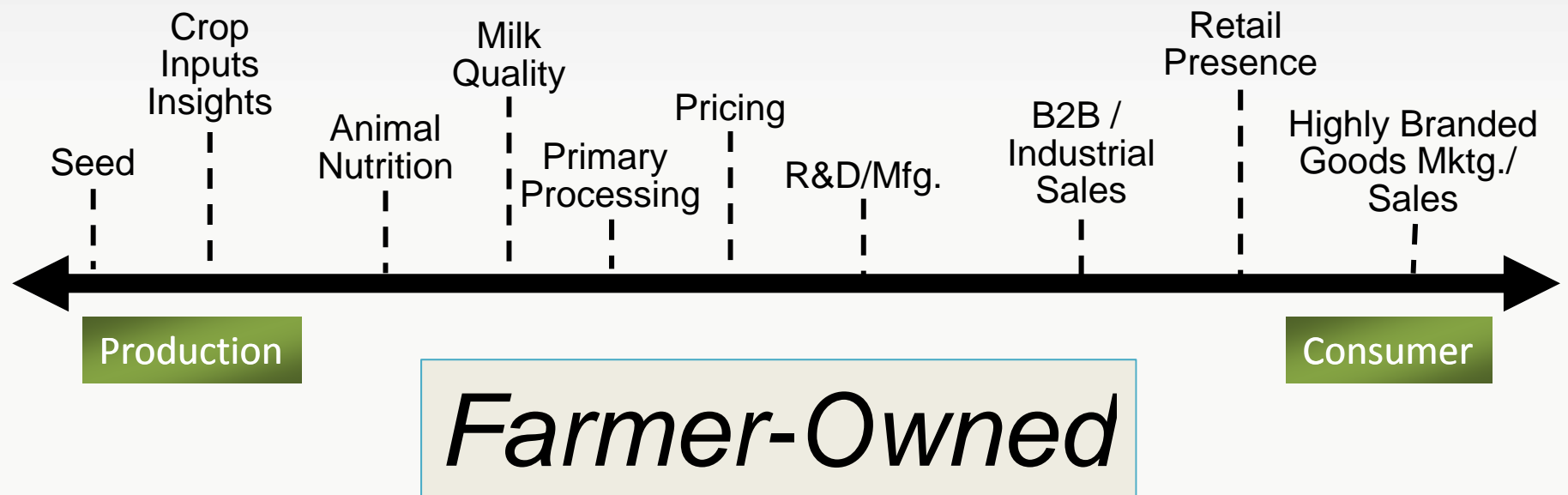


**2012 Sales
\$14.1 billion**



Land O'Lakes

Truly spans the “farm-to-market” spectrum



Land O'Lakes Portfolio

- Leading market positions
- Branded, value-added focus



WINFIELD™



Unprecedented Global Growth Opportunity of Agribusiness and Food Production

Opportunity

Agriculture, agribusiness and the food industry offer the greatest growth opportunity of our era



- World population to grow from 7.0 billion to 9.2 billion by 2050
- Global food production will have to increase 70% to meet higher demand

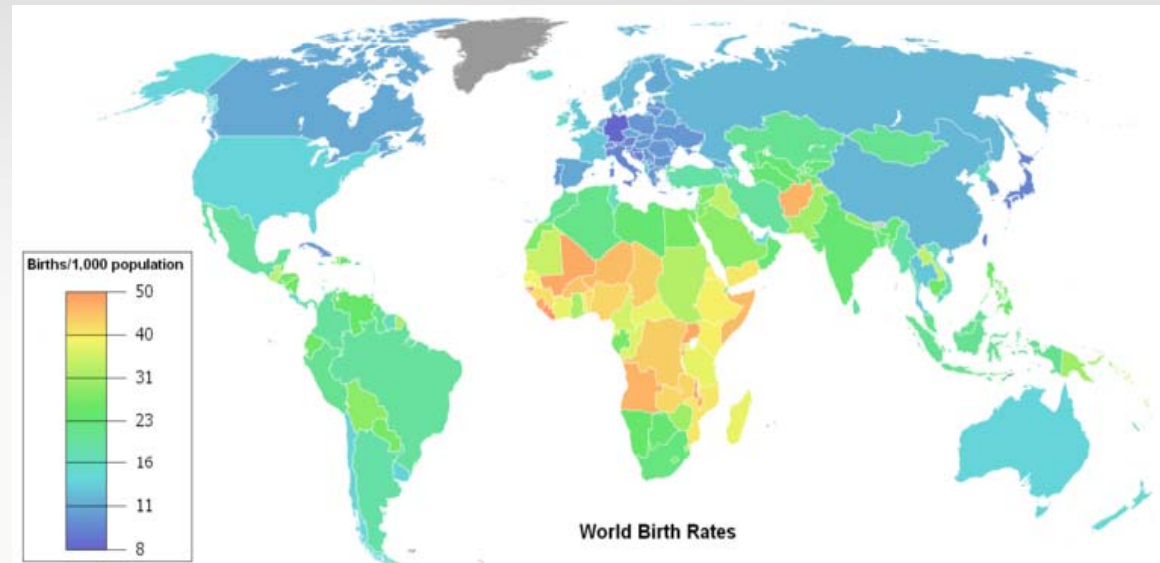
Source: United Nations Food and Agricultural Organization

7.6 Billion People By 2020

4.0 Billion in 10 countries alone!

Most Populated Countries In 2020

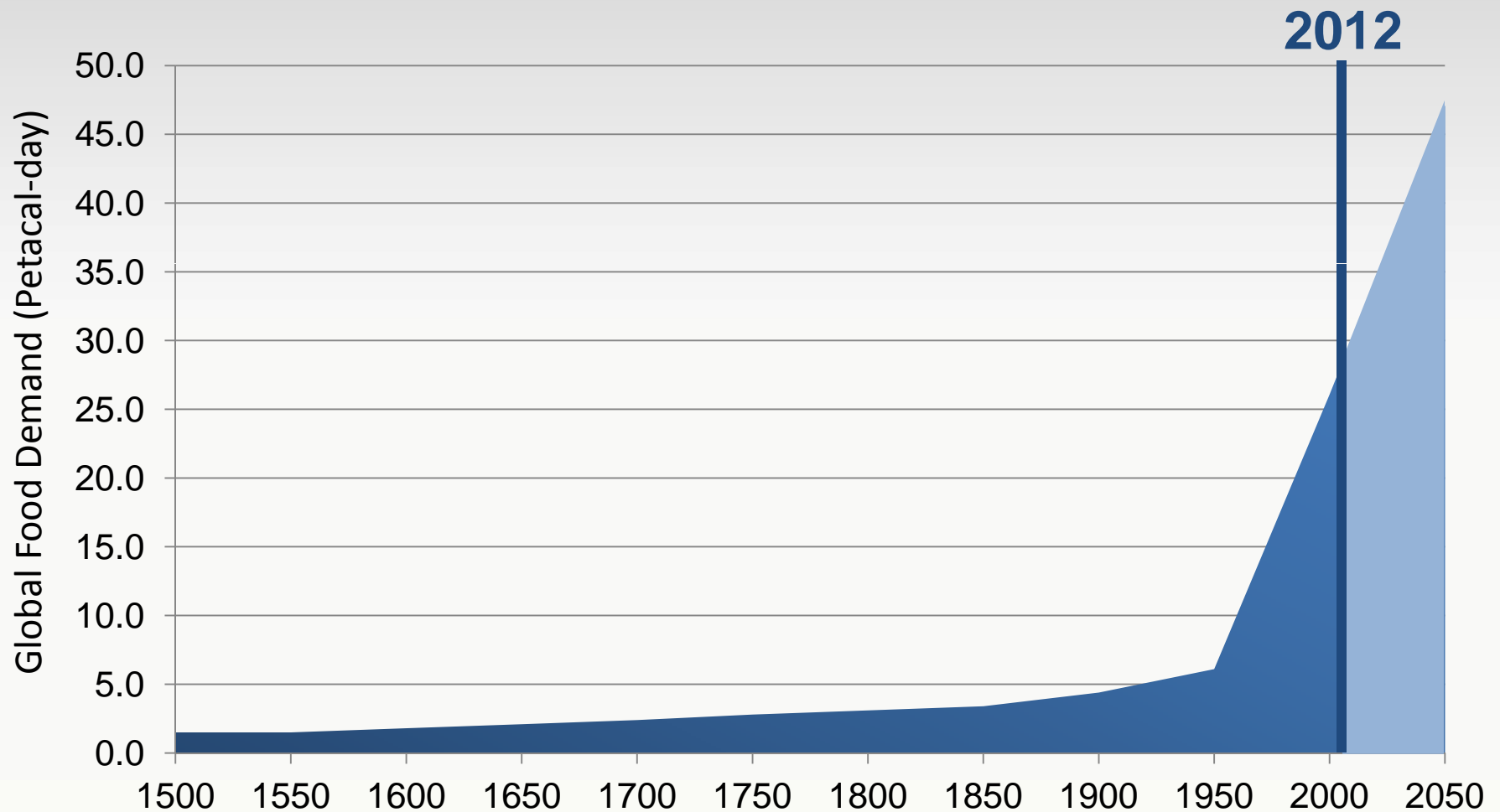
1. China (19%)
2. India
3. US
4. Indonesia
5. Brazil
6. Pakistan
7. Bangladesh
8. Nigeria
9. Russia
10. Japan



But the highest growth rate over next 10 years will be in Africa

Source: Wikipedia; CIA Factbook 2012; 2011 Population Reference Bureau

Food Production Demand Over Next 50 Years Will Exceed Previous History



Source: Graph based on data from Food and Agriculture Organization of the United Nations

Challenge: *Limited Resources*

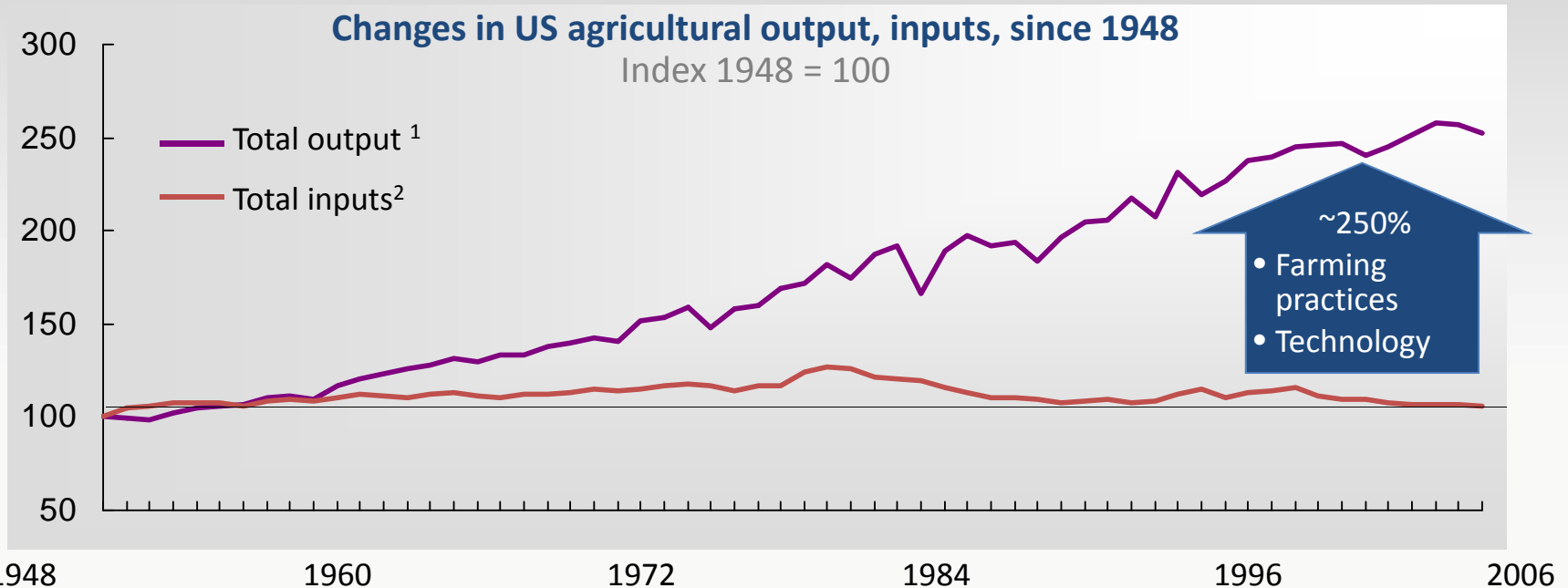
- At most, only 12% more arable land is available globally
- Only 5% more land is projected to be cultivated by 2050
- Demand to outstrip water supply by 40% by 2030

We must produce more food, with fewer resources and less environmental impact!

Source: OECD-FAO, global water supply/demand model; agricultural production based on IFPRI computed general equilibrium model base case; A Daunting Task, Prof. Robert Thompson (2010)

The Great Untold Productivity Story of American Agriculture

U.S. Farmers Lead Ag Productivity



In 1930...	<ul style="list-style-type: none"> One farmer fed 10 people 	<ul style="list-style-type: none"> 25% of income spent on food 	<ul style="list-style-type: none"> 22% of the US workforce in Ag
Today...	<ul style="list-style-type: none"> One farmer feeds 155 people 	<ul style="list-style-type: none"> 10% of income spent on food 	<ul style="list-style-type: none"> 2% of the US workforce in Ag

¹ Total output is an aggregation of crop and livestock commodities and related services

² Total input is an aggregation of land, labor, capital and intermediate inputs like fertilizer, feed and seed

SOURCE: Productivity Growth in US Agriculture, USDA (2007); Economic Research Service; American Farm Bureau Federation

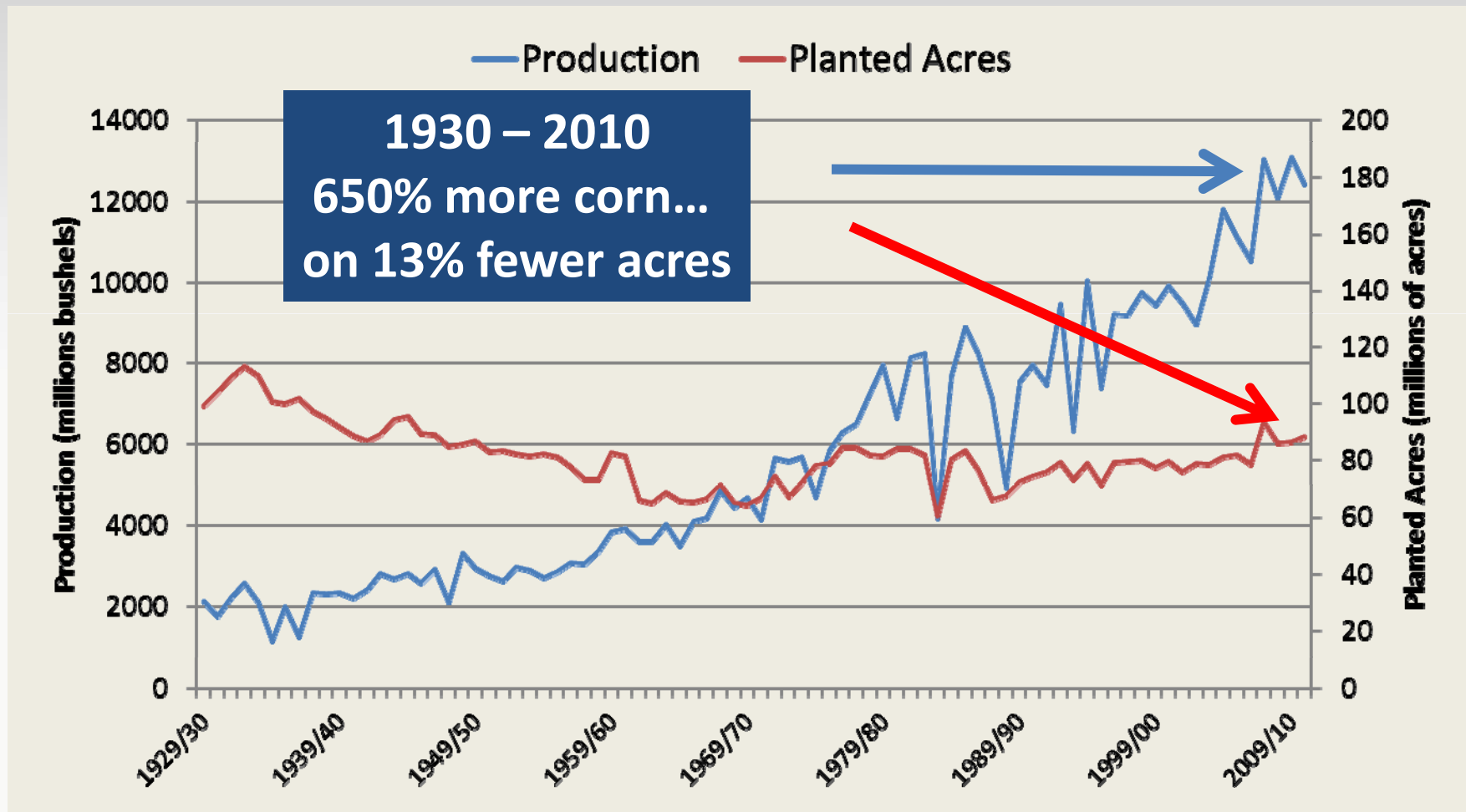
Agricultural Productivity Has Soared



Since 1960, U.S.

- Corn yields have tripled
- Wheat Yields have tripled
- Soybean yields are up 70%
- Milk production per cow has tripled
- Pork production per sow has more than doubled
- Beef production per head is up 50 percent

Productivity Drives Sustainability!

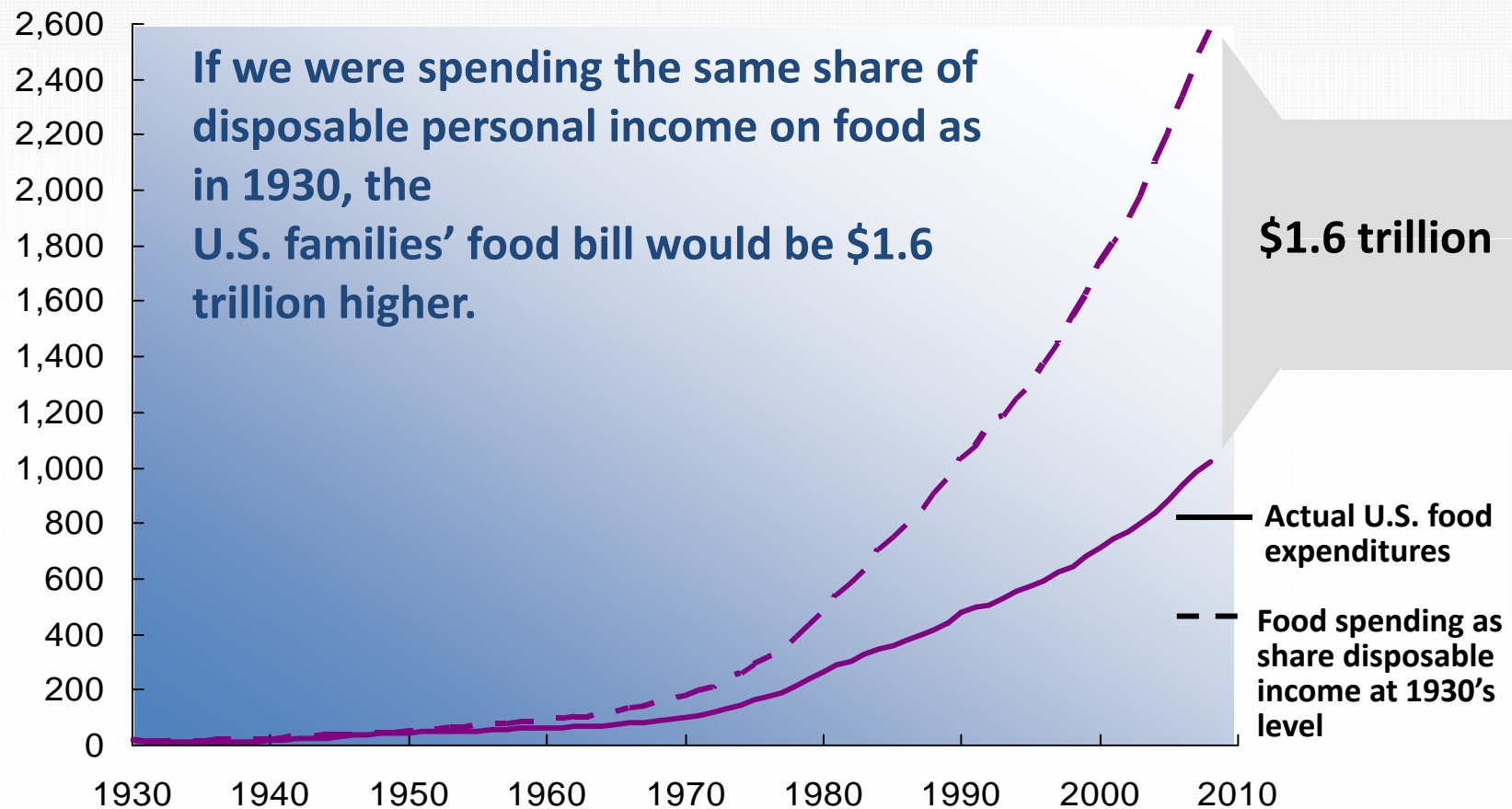


Source: USDA Economic Research Service

Increase In Ag Productivity Has Created Broader Value

Food expenditures as a share of disposable personal income

Billion dollars



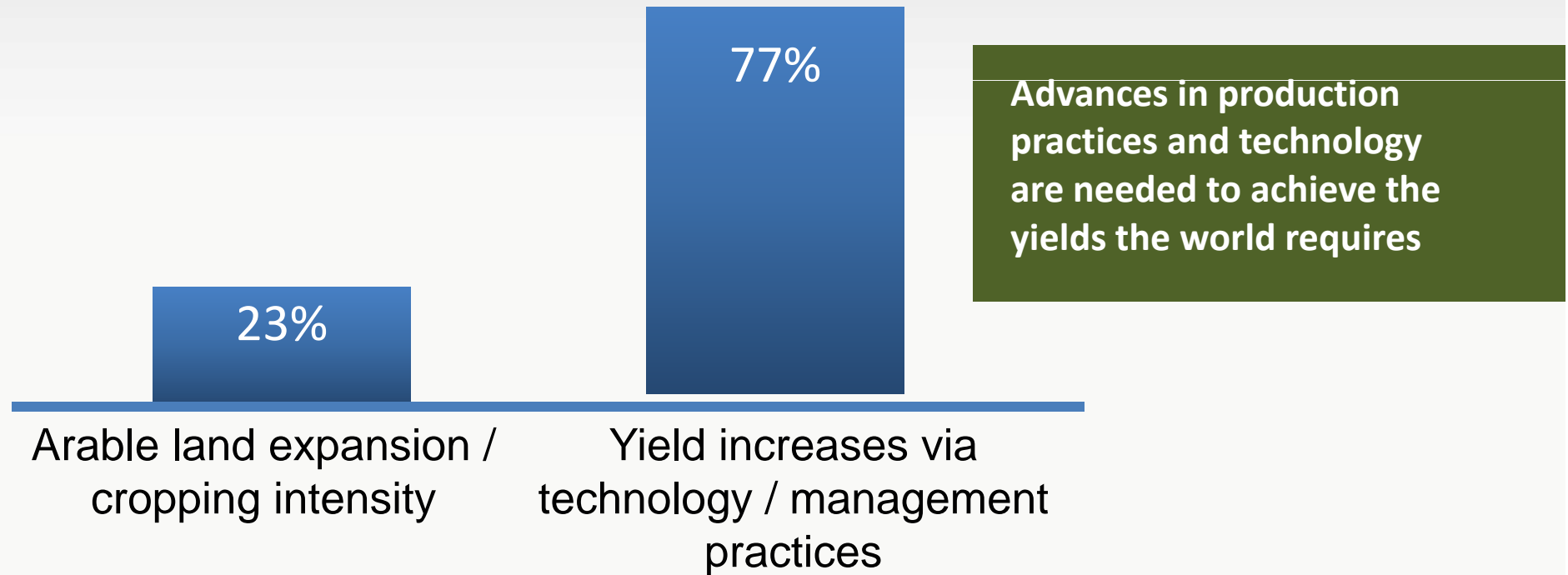
SOURCE: USDA Economic Research Service

Size / Technology Required to Feed 9 Billion!

Advanced Management Practices, Technology
Are THE Most Essential Productivity Levers

Sources of growth in crop production, 2005-2050

Percent



SOURCE: FAO Expert Meeting on How to Feed the World in 2050 (2009)

Investment Is Also Required

Ag Research

Agricultural R&D represents only about 2% of the total USDA budget



Source: Center for Strategic & International Studies

Infrastructure

\$2 trillion needed for U.S. Infrastructure

- Transportation
- Ports
- Inland waterways



Source: Urban Land Institute

Agriculture Productivity Drivers

- Adoption of modern business, production management practices on the farm
- Application of safe, proven agricultural technologies

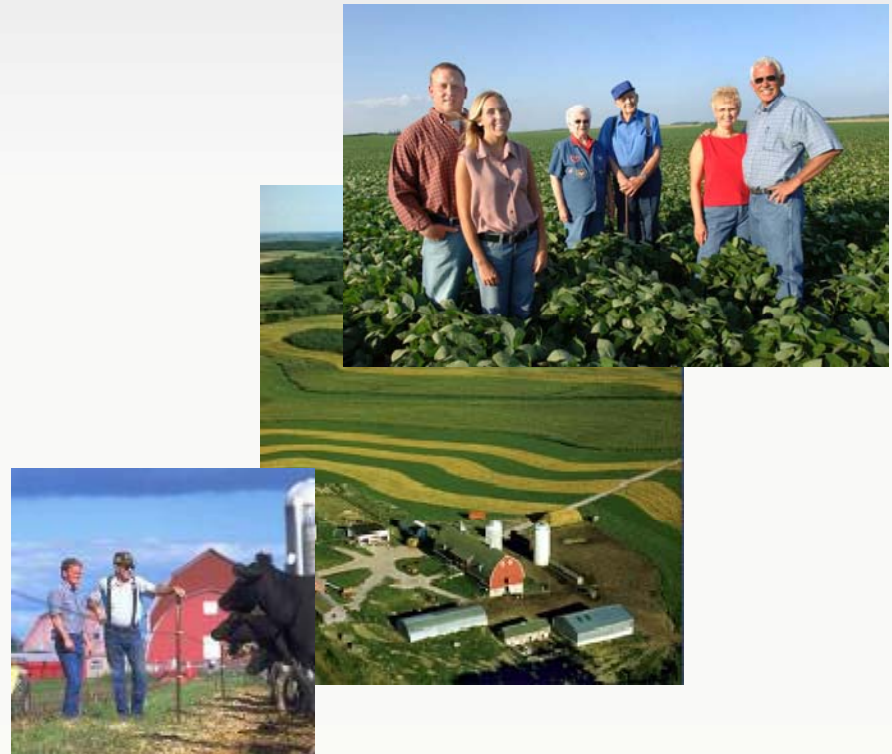
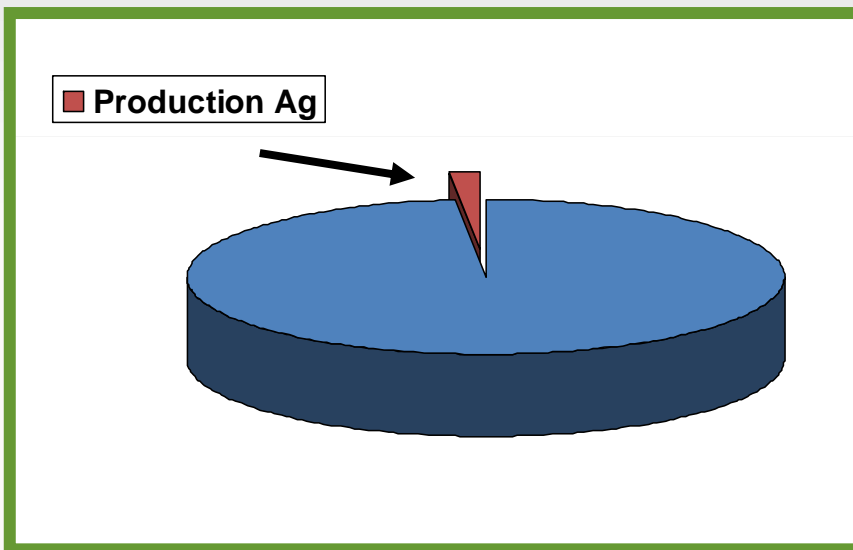
Land O'Lakes Strategy

Productivity = Sustainability = Feeding A Growing World



Irony

Less than 2% of the U.S. population is directly involved in production agriculture.



Challenge

Consumer Trust and Confidence in Our Supply Chain

Recent Headlines

"Minnesota could become the next battleground in the fight over mandatory labels for genetically modified food"-- Minneapolis StarTribune, February, 2013

"Federal Court Upholds California Proposition 2 ...Cleared To Take Effect in 2015"--Humane Society News, September, 2012

"Genetic changes to food may get uniform labeling"--- New York Times, February, 2013

"A Beastly Business: Peaceful protests against animal testing are on the rise"---The Economist 2011

"Proposition 37 Food-Labeling Law Fails"--NBC, November 2012

"Is Pink Slime in the beef at your grocery store?"---ABC News, March 2012

"Why the rBST Hormone shouldn't be In your glass of milk"---Organic Consumers Association, 2013

Some Real Opportunities For Improvement

"Food Safety and Modernization Act rolled out...hailed as most sweeping overall in 70 years"--USA Today, January, 2013

"E. coli outbreak sickens 14 in six states"---CNN, June 2012

"Leafy greens top source of food-borne illnesses, Center For Disease Control says"---Los Angeles Times, January, 2013

"Salmonella outbreak prompts peanut butter recall"---USA Today, September, 2012

"Battle over blame after horse meat found in beef products"--CNN, February, 2013

"Health official traces source of E. coli outbreak to lettuce"---CTV News, January, 2013

Going Forward....Role Of:

- Academia
- Regulators
- Industry Players
- The “2%”

Great risk to sustainably

Feeding the “soon to be”

9+ Billion

A Final Thought.....

“The world has the technology, either available or well-advanced in the research pipeline, to feed a population of 10 billion people.

The more pertinent question today is whether farmers and ranchers will be permitted to use this new technology.”

Dr. Norman Borlaug



Thank You!