

## Monsanto, Agriculture and SUSTAINABILITY







### **Commitment to Sustainability Video**







### Monsanto Company "Agriculture is our only business"



#### Focused on the farmer

"We succeed when farmers succeed." -Hugh Grant, Monsanto CEO

#### and the future of agriculture.

Monsanto is 100% focused on agriculture.







# Agriculture at the Intersection of Global Challenges







# Global demand for meat is expanding as population and income grows



Source: IHS Global Insights, Agriculture Division



# Global demand for crops increasing as population and income continues to rise



Source: IHS Global Insights, Agriculture Division



### What is Sustainability?



"... development that meets the needs of the present without compromising the ability of future generations"





#### **Monsanto's Sustainable Yield Initiative**

Reduce use of key resources by 1/3 per Conserve unit of output More **Produce** More Improve Farmers of all sizes **Farmers'** become more Lives productive, including >5M people in resourcepoor farm families

Help corn, soy & cotton farmers double yields



## **PRODUCE MORE**



#### **Goal:**

Help farmers double yields of corn, soybeans and cotton from 2000-2030



# Breeding, agronomic practice improvements and biotechnology can maximize yield gains

CORN YIELD POTENTIAL TO 2030 IN THE UNITED STATES





Sources: U.S. Department of Agriculture, Monsanto Company estimates



#### US is expanding corn yields at 4x the rate of EU



imagine

## **CONSERVE MORE**



Goal:

Help farmers reduce use of key resources used in agriculture by 1/3 per unit of output

## ticipants

#### **Keystone Committee Members and Participar**

- American Farm Bureau Federation
- American Soybean Association
- Bayer CropScience
- Bunge
- Cargill
- Conservation International
- Conservation Technology Information Center
- Cotton Incorporated
- CropLife America
- CropLife International
- DuPont
- Fleishman-Hillard
- General Mills
- Grocery Manufacturers of America
- John Deere
- Kellogg Company
- Land O'Lakes

- Manomet Center for Conservation Science
- Mars, Incorporated
- Monsanto Company
- National Association of Conservation Districts
- National Association of Wheat Growers
- National Corn Growers Association
- National Cotton Council of America
- National Potato Council
- Syngenta
- The Coca-Cola Company
- The Fertilizer Institute
- The Nature Conservancy
- United Soybean Board
- World Resources Institute
- World Wildlife Fund
- University of Arkansas Division of Agriculture
- University of Wisconsin-Madison College of Agricultural and Life Sciences



# Resource use efficiency improves, driven by higher yields

CORN	COTTON	SOYBEANS	WHEAT
			Nil
			-50%
			Nil
			-9%
			+15%

(Percent reduction of inputs per Unit of Output, 1987-2007, United States)



Source: Field to Market Alliance

## **IMPROVE FARMERS' LIVES**



#### **Goal:**

Farmers of all sizes become more productive, including >5M people in resource-poor families



### **Scale Neutral Benefit of GM Crops**

Economic & Environmental Impacts

> \$33.8 billion added net income >100 MMT of additional crop

production (higher yields)

286 million kg in pesticide applications

14.76 billion kg of GHG emissions (CO<sub>2</sub>-eq)





Source: <u>GM Crops: global socio-economic and environmental impacts 1996-06;</u> Brookes & Barfoot; PG Economics UK Ltd



### Working Together: **PARTNERS**