Agriculture Overview: MODERN FARMING
Our Planet Faces Real Challenges
Rising Population

Growing enough for a growing world

Source: http://esa.un.org/unpd/wpp/
Changing Economies and Diets

A growing global middle class is choosing animal protein – meat, eggs, and dairy – as a larger part of their diet.

Dietary Percentage of Protein

- 1965: 9%
- 2030: 14%

Source: UN FAO Food Balance Sheet, World Health Organization Global and regional food consumption patterns and trends”
Limited Farmland

Farmers will need to produce enough food with fewer resources to support our world population.

Source: The World Bank, Food and Agriculture Organization of the United Nations (FAO-STAT), Monsanto Internal Calculations
Changing Climate

Farmers are impacted by climate change in many ways:

- **WATER AVAILABILITY ISSUES**
- **INCREASINGLY UNPREDICTABLE WEATHER**
- **INSECT RANGE EXPANSION**
- **WEED PRESSURE CHANGES**
- **CROP DISEASE INCREASES**
- **PLANTING ZONE SHIFTS**

Source: US Third National Climate Assessment (2013)
A Broad Range of Solutions
Collaborative Innovation

Making a balanced meal accessible for everyone, and doing it in a sustainable way requires a wide range of ideas and resources.
Protection from Weeds, Insects and Diseases

At any stage, plants are threatened by weeds, insects and diseases.

Scientists and farmers look at the issues that might affect future crop growth and create solutions to help protect plant health and minimize environmental impact.
Solutions for Sustainable Agriculture

- Precision Agriculture
- Plant Breeding
- Biotechnology
- Microbials
- Crop Protection
## Precision Agriculture Helps Farmers Manage Multiple Decisions Every Season

### Farmer considerations:

<table>
<thead>
<tr>
<th>PLANNING</th>
<th>PRE-PLANTING</th>
<th>PLANTING</th>
<th>IN-SEASON</th>
<th>HARVEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Farm Planning</td>
<td>Pre-Plant Irrigation</td>
<td>Seed Depth</td>
<td>Keep Stand or Re-Plant</td>
<td>Weed Control</td>
</tr>
<tr>
<td>Weed Control Program</td>
<td>Fertility Program</td>
<td>Planting Speed Through the Field</td>
<td>Post-Emergent Herbicide Application</td>
<td>Insect Control</td>
</tr>
<tr>
<td>Row Spacing</td>
<td>pH Management</td>
<td>Other Planting Operation Decisions</td>
<td>Foliar Insect Control</td>
<td>Disease Control</td>
</tr>
<tr>
<td>Variety/Hybrid Selection</td>
<td>Burn-Down Program</td>
<td>Starter Fertilizer</td>
<td>Fertility Program</td>
<td></td>
</tr>
<tr>
<td>Refuge Options</td>
<td>Tillage Level</td>
<td>Herbicide Application</td>
<td>Foliar Disease Control</td>
<td></td>
</tr>
<tr>
<td>Plant Population</td>
<td>Primary Tillage Program</td>
<td>Soil Insecticides</td>
<td>Fertility Program</td>
<td></td>
</tr>
<tr>
<td>Seed Treatment</td>
<td></td>
<td>Fungicide Application In-Furrow</td>
<td>Foliar Disease Control</td>
<td></td>
</tr>
<tr>
<td>Soil Insecticides</td>
<td></td>
<td></td>
<td>Irrigation Application</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Innovators in agriculture are responsibly discovering ways to increase production and quality of crops while reducing inputs and maximizing sustainability.
Presenter Notes

Thank you for communicating modern agriculture.

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Please contact Milton Stokes, RD at milton.stokes@monsanto.com with questions or further context about the slide content.