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Crop Science Division at a glance

The world's leading agricultural company across product segments and geographies

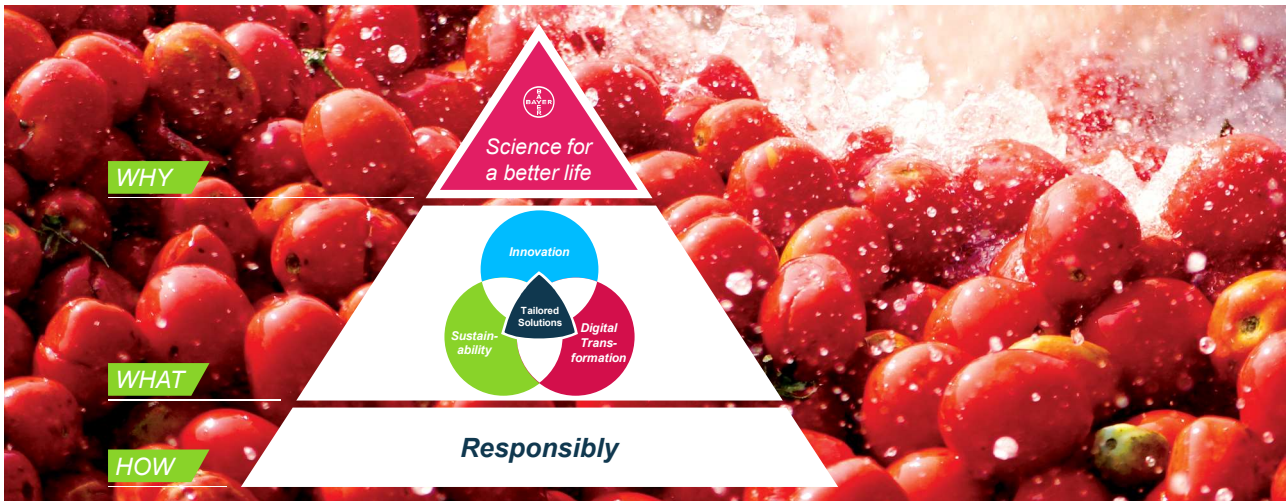


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Shaping agriculture to benefit farmers, consumers and our planet

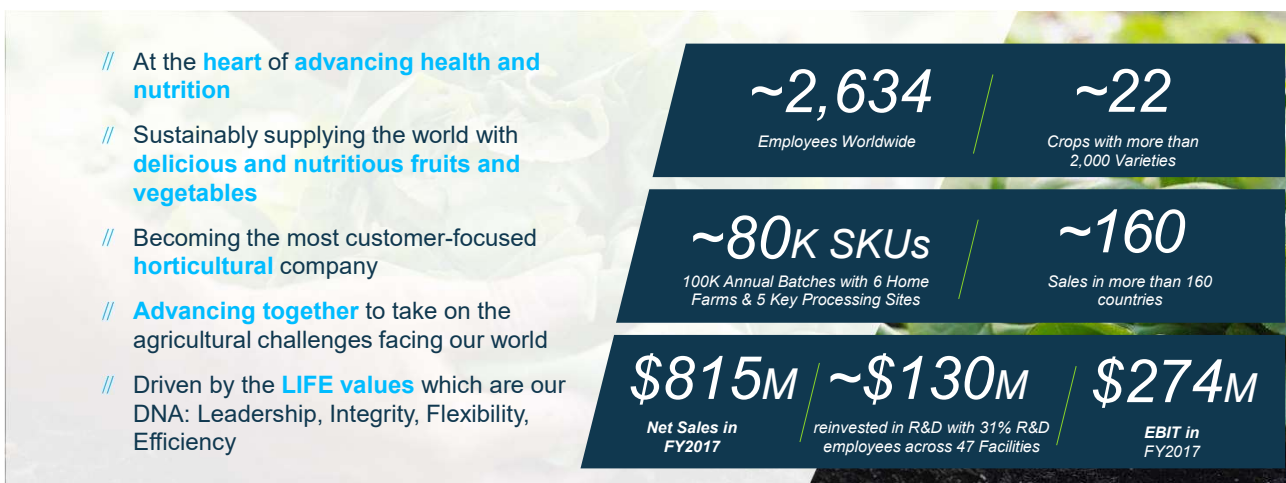


3 /// Crop Science Division Profile /// March 2019

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Our Global Vegetable Seeds Organization



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Our Vegetable Seed Brands



5 /// Fruit Logistica /// February 2019

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Vegetable Seeds: R&D Strategy

Technology solutions to transform the vegetable industry focused on four core elements



6 /// Fruit Logistica /// February 2019

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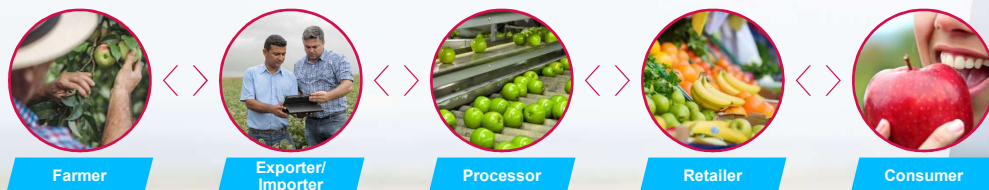


A Diverse Value Chain with Different evolving Needs...

Delivering safe and healthy foods through food chain partnerships

Sets focus

on the **collaboration between growers, traders, processors, and retailers.**



Certifications / Capacity Building

Growers need the support to fulfil the certification requirements of the value chain

The **aim** is to implement best agricultural practices

// to meet customer requirements regarding **food quality, food safety, and traceability.**

// to improve yields and harvest quality, and **reduce food waste** while helping to drive **sustainable agricultural principles.**

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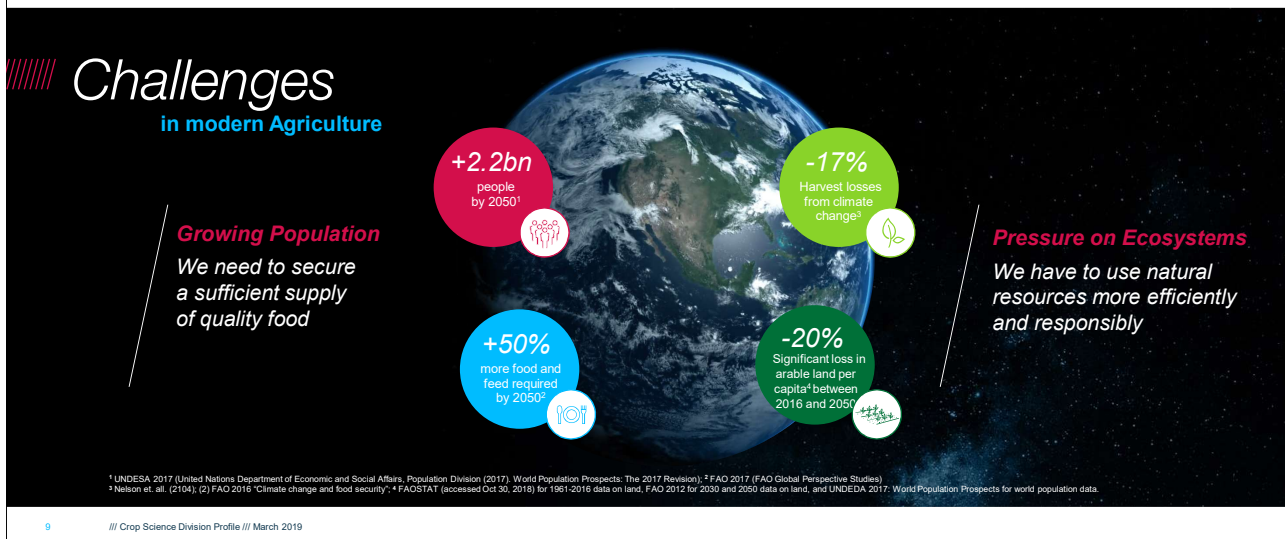
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Megatrends drive need for innovation in agriculture

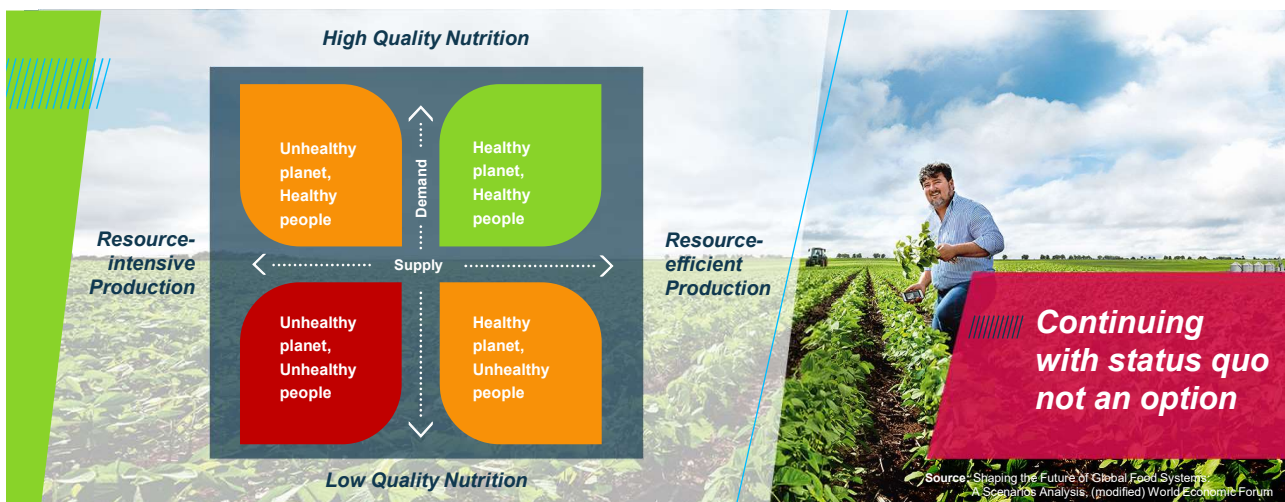
Producing more with less: A fundamental driver for sustainable agriculture



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The current food system is not on a sustainable path



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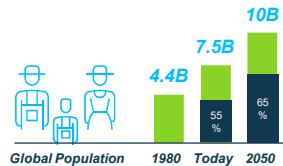
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Food Security is a huge challenge and directly linked to sustainability



Rising Population and Urbanization



Changing Economies and Diet



Changing Climate



Limited Farmland



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We listened. *We learned.*



That's why we're **increasing sustainability in agriculture** with a clear benchmark:



With our products, we aim to **reduce the environmental impact by 30%** by 2030.



We will develop **innovative solutions** to produce better—**not just more.**



We will form a **Bayer Sustainability Council** to inspire new thinking and **challenge** our standards.



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Consumer's demand for increased Transparency is addressing the same questions that will drive Sustainability and Technology



Transparency

WHAT's in my fruits and vegetables?

- What's the Nutritional Value?
- How does it improve my Personal Health?
- Are they Safe? Are they Clean?
- Are they Fresh, when will they Expire?

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Solutions



*Trusted
Health and
Nutrition
information
source*



*Digital
Tools, Data
Analytics and
Traceability
across supply
chain*



*Controlled
Environment*



Consumer's demand for increased Transparency is addressing the same questions that will drive Sustainability and Technology



Transparency


WHO produced my fruits and vegetables?

- Do they care about Social Responsibility, Good Production Practices and Food Safety?
- Did it support the Local community? Did Smallholder Farmers get Access to the latest technology?


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Solutions



Partnerships




Automation



*Smallholder
Farmers*



Consumer's demand for increased Transparency is addressing the same questions that will drive Sustainability and Technology



Transparency

HOW were my fruits and vegetables produced?

- Was it done efficiently with Limited Waste of natural resources, limited use of chemicals, minimal carbon footprint, limited food waste and loss? Was it produced to respond to a Consumer Demand?
- In which Growing Environment and what Technologies were used?

Solutions



Precision Horticulture



Digitize, Optimize, Predict



Novel Growing Environments

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Working Together for Innovation and Sustainability

We are dedicated to...

- // **...innovating** for horticulture production
- // **...driving** Tailored Agronomic Solutions for growers of all sizes
- // **...further enhancing** our food chain activities
- // **...partnering and connecting** with external stakeholders
- // **...empowering** growers to produce sustainably

> **Bayer is committed to a safe and secure food supply and advancing health and nutrition around the world**



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Thank you

www.bayer.com

