Diverse Field Crops

July 9, 2013

Presented by:
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Ioana Tudor
Diverse Field Crops: significant growth by 2020

Sales $bn

- **Sunflower:** drive leadership
- **Oilseed rape:** achieve scale
- **Sugar beet:** grow profitably

CAGR: 7.4%
CAGR: 10%
CAGR: 5%
CAGR: 5%
Vegetable oil demand driven mainly by food and biofuels

- Rapeseed & sunflower oil production balance demand
- Soybean oil a by-product of soybean meal, which represents 80% of protein feed
- Palm oil production driven by low cost of planting palm trees in Indonesia and Malaysia

- Food: population growth in China/India to make up 40% of total demand in 2025
- Biofuels: driven by official initiatives (especially EU, USA, Brazil)
- Other industrial: driven by oleochemicals used to produce fatty acids

Source: LMC Oilseed & Oil report, Syngenta analysis

*Other includes corn, coconut, groundnut, cottonseed, palm kernel oil

Classification: PUBLIC
Growing sugar demand: 20% met by sugar beets

- Economic growth: shifting diets
- Population growth: ~8bn people by 2025
- Biofuels use: Brazil, EU

Sugar beet remains a significant global source of sugar

- Production is geographically fixed
- Countries desire for sugar independence
- Regulated industry (quotas in EU, US)
- Limited ability to substitute sugar types

* Does not include artificial sweeteners

Source: FAPRI, USDA, ISO, Syngenta analysis
# DFC: significant difference in value per hectare*

<table>
<thead>
<tr>
<th>Crop</th>
<th>2012 area (Mha)</th>
<th>2012 market value ($bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter oilseed rape</td>
<td>9.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Canola (North America &amp; Australia)</td>
<td>11.5</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Seed: all hybrid, high value</strong></td>
<td><strong>Driven by biotech</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Extensive crop, growing rapidly</strong></td>
<td><strong>CIS focus</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Highest grower spend per hectare</strong></td>
<td><strong>Regulated industry</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Markets in which Syngenta is present; Syngenta estimates

Source: Informa Economics, Syngenta analysis
Grower spend varies by region

2012 DFC global acreage and grower spend per hectare*

<table>
<thead>
<tr>
<th>Region</th>
<th>Acreage, Mha</th>
<th>Spend, $ per ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunflower</td>
<td>~25Mha</td>
<td>0.8 145</td>
</tr>
<tr>
<td>Oilseed rape</td>
<td>~34Mha</td>
<td>0.5 410</td>
</tr>
<tr>
<td>Sugar beet</td>
<td>~5Mha</td>
<td>2.5 450</td>
</tr>
<tr>
<td>Syngenta not present</td>
<td></td>
<td>0.7 40</td>
</tr>
</tbody>
</table>

* Spend per hectare includes total spend on seed, crop protection and seed care
6 Source: USDA, Informa Economics, European Commission, Syngenta analysis
Broad portfolio ensures strong position across crops

Syngenta 2012 global market share

**Sunflower**
- Seeds: 41% ($900m)
- Seed care: 25% ($80m*)
- CP: 33% ($350m)
- Seeds: Syngenta only global player
- Seed care: further adoption and intensification opportunity
- Crop protection: strong herbicide portfolio

**Oilseed Rape**
- Seeds: 8% ($300 m**)
- Seed care: 35% ($125m*)
- CP: 19% ($1300m)
- Seeds: biotech in North America, fragmented market in Europe
- Seed care: new offers and intensification opportunity
- Crop protection: consolidated market

**Sugar Beet**
- Seeds: 22% ($900 m)
- Seed care: 45% ($100m*)
- CP: 17% ($580m)
- Seeds: biotech in North America, largely private companies in Europe
- Seed care: consolidated market, Syngenta leader in the CIS
- Crop protection: Syngenta leader in high-value fungicides

* Market value includes seed care portion of treated seeds
** Winter oilseed rape only
Source: Syngenta estimates
Sunflower
Sunflower: an attractive crop for growers and consumers

**Attractiveness towards grower**
- Convenient
  - easy to grow
  - perfect for dry land
  - responds well to intensification
- Profitable

Gross margin of Ukrainian farmer* $/ha

<table>
<thead>
<tr>
<th>Crop</th>
<th>Margin ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunflower</td>
<td>750</td>
</tr>
<tr>
<td>Corn</td>
<td>590</td>
</tr>
<tr>
<td>Wheat</td>
<td>400</td>
</tr>
<tr>
<td>Barley</td>
<td>380</td>
</tr>
</tbody>
</table>

* Gross margin calculated by deducting direct costs of growing crop (excluding land cost) from total revenues of crop, using commodity prices of 2012.

Source: LMC Report 2013

However, there are limitations to the crop
- Crop rotation restrictions
- Early technification stage
- Less transparency in value chain

**Attractiveness towards consumer**
- Good health profile
- Very low saturated fats
- Sustainable production
Securing market leadership in sunflower

- Seeds CAGR 25%
- Blockbuster hybrids, superior germplasm
- Early anticipation of market trends: IMI
- Focused portfolio of products
- Efficient use of technology
- Advanced go-to-market strategy
- Successful integration of acquisitions

Syngenta sunflower sales

$\text{Acquisition: Sunfield Seeds}
\text{IMI tech licensing agreement: BASF}
\text{Broomrape center: Stein}

New integrated strategy

CAGR: 19%

Crop protection
Seed care
Seeds
Leverage market leadership with innovation

Major growth contributors:

- Crop protection: early season weed control combination with IMI-based offers
- Seed care: increase seed care adoption with CRUISER and VIBRANCE; new mode of action for downy mildew control
- Seeds: growth in CIS markets; increase transition from low to high-value seeds
- Integrated solutions: enabling broomrape weed resistance management
Argentina: the making of a success story

Syngenta Argentina sales $m

- Seed:
  - Portfolio streamlining
  - Broad market coverage
  - Smooth brand and channel alignment

- Crop protection: successful sales pull in an already intensive market

- Seed care:
  - 100% of Syngenta seeds are treated
  - Solutions to control new diseases (i.e. downy mildew)

Source: Syngenta estimates
Argentina: Delivering a strong product pipeline

- State of the art breeding facilities in Camet
- Advanced field trialling capabilities
- Supports Latin America, South Africa
- Counter season for Europe

* Yield premium: a 2% increase in yield for every 1% additional oil content above 42%
# Sunflower: innovating to drive leadership

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaping the crop: health &amp; sustainability</td>
<td>• High oleic adoption&lt;br&gt;• Sustainable farming practices</td>
</tr>
<tr>
<td>Innovating in weed management solutions</td>
<td>• Addressing broomrape challenge&lt;br&gt;• Early season weed control</td>
</tr>
<tr>
<td>Driving technology adoption in Russia and Ukraine</td>
<td>• Shift from low to high-value hybrids&lt;br&gt;• Seed care and crop protection adoption</td>
</tr>
<tr>
<td>Supply chain excellence</td>
<td>• Best in class field production&lt;br&gt;• Reliable supply chain to sustain growth</td>
</tr>
</tbody>
</table>
Transitioning high oleic from niche to mainstream

Fatty acid profile by oil type

<table>
<thead>
<tr>
<th></th>
<th>Saturated</th>
<th>Mono-unsaturated</th>
<th>Poly-unsaturated</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO* sunflower</td>
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<tr>
<td>Rapeseed</td>
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<tr>
<td>Sunflower</td>
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<tr>
<td>Olive</td>
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<td>Corn</td>
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<td>Soybean</td>
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<td>Palm</td>
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<tr>
<td>Coconut</td>
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</tbody>
</table>

- HO sunflower is a stable oil that has a higher shelf life and allows frying for increased number of times
- High oleic (HO) content reduces risk of cardiovascular diseases (like olive oil)
- Adoption not uniform across countries due to supply chain blockers/downstream pull
- Syngenta leader in high oleic market, best positioned to drive growth
  - leader in HO breeding
  - facilitating supply chain organization
  - creating and capturing value: 10% premium across the value chain

High oleic oil adoption: 2012

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
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<tbody>
<tr>
<td>USA**</td>
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<td>Ukraine</td>
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<tr>
<td>Russia</td>
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</tbody>
</table>

* High Oleic sunflower oil
** US includes adoption of mid oleic oils
Source: LMC Oilseed & Oil report, FAT & Associes
Integrated offers support sustainable farming practices

Example: conservation tillage

What is conservation tillage?
- Soil cultivation that leaves a percentage of the previous year’s crop residue on the surface
- Range: ‘minimum tillage’ 30-70% of previous crop residue to ‘no tillage’ 70-100% of previous crop residue
- A multi year initiative for the grower to reap soil benefits

Cross crop benefits for grower
- Water conservation
- Labor and fuel efficiency
- 60-90% less soil erosion
- More carbon in soil

Syngenta technology
- Providing genetics and chemistry for conservation tillage
- Technical expertise and advice on agronomy

* Example of no tillage

Source: Minnesota Department of Agriculture
Technology leadership for broomrape

A devastating parasitic weed of major concern: 50% of Europe infested

- The parasitic plant attaches to roots and depletes the host of nutrients and water
- Spreads easily (50k seed/plant), mutates frequently and lasts long in the soil
- Causes severe yield losses
- Controlled today with native traits and limited crop protection
Driving intensification in Russia and Ukraine

Global sunflower market 2012
Grower spend: seeds, seed care, crop protection
$/ha

2012 market: $0.5bn
Grow adoption*: $0.2bn
Grow intensity**: $0.3bn

2020 market: $1bn

CIS growth

* Adoption of hybrid seeds and seed care: 53% Russia, 47% Ukraine
** Intensification in application of chemistry: 37% Russia, 63% Ukraine

Source: USDA, Informa Economics, Syngenta analysis
Best in class sunflower seeds production

- Many risk elements impacting field production
- Seed quality and volume driven by production conditions
- High competition for best growing areas and most knowledgeable growers
- Production cost split: 70% field production, 30% seed processing

Global field production ensures supply reliability and optimum risk management

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
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<td>France</td>
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<td>USA</td>
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<td><strong>Total</strong></td>
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</tbody>
</table>

Annual production
- +/- 30%
- +/- 10%
- Optimum

- Production research expertise helps maximising yield and quality
- Ongoing commitment to long-term investment and development

Source: Syngenta analysis
Acquisition of Sunfield Seeds secures supply chain capability

**Acquisition drivers**

<table>
<thead>
<tr>
<th>Ideal growing area</th>
<th>• Sacramento Valley, California: major sunflower seed production area, key supplier to Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional management team</td>
<td>• Experienced team that has worked with Syngenta for 15 years</td>
</tr>
<tr>
<td>Direct grower network</td>
<td>• Professional grower network set up within 100 miles of processing facilities</td>
</tr>
<tr>
<td>Modern processing facilities</td>
<td>• Excellent processing capacity which is being further expanded post-acquisition</td>
</tr>
</tbody>
</table>
Oilseed Rape
Oilseed rape: crop type differs by region

Oilseed rape global acreage and yield by type 2012

2012 total acreage: ~34 Mha

- Canola
- Winter oilseed rape
- Brassica juncea
- Chinese winter oilseed rape
- Syngenta not present

2012 oilseed rape global market*: $3bn

- Canada
- EU 27
- Australia
- China
- CIS
- India

* Total market size including seed, crop protection and seed care

Source: Informa Economics, Syngenta analysis
Winter oilseed rape: transitioning from lines to hybrids

Benefits for the farmer:
- superior yield and profitability
- improved tolerance to abiotic stresses
- disease resistance/oil profile conferred by native traits

proprietary hybridisation system:
- enables faster genetic gain
- increased yield

WOSR hybrid trends

<table>
<thead>
<tr>
<th>Year</th>
<th>Lines</th>
<th>Hybrids</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>47%</td>
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</tr>
<tr>
<td>2012</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>85%</td>
<td></td>
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</tbody>
</table>

Grower seed spend
- $60/ha
- $100/ha

Crop yields
- 3.2t/ha +10% 3.5t/ha

Incremental ROI*
- ROI: 3.3

* Germany example: calculated by dividing incremental cost with incremental profit: $40/130 = 3.3.

Oilseed rape commodity price of $570/ton

Classification: PUBLIC
Winter oilseed rape: crop protection launches in Western Europe

- New mode of action insecticide for pollen beetle control
  - **Plenum®**
    - Sales 2012: $9m
  - One-shot Plenum spray controls all pollen beetles
  - STOP OSR pollen beetle invasion

- A unique product with combined phoma and growth regulator features
  - **Toprex®**
    - Sales 2012: $24m

- New flowering stage fungicide based on SDHI technology
  - **Symetra®**
    - 2014 launch
    - Allows delivery of optimal yield and quality in every field and every season
Total Farm Approach: a cross-crop opportunity in Canada

Canola market value in Canada

Syngenta entering Canola with:

- Leverage strong CRM* and in depth grower knowledge to enter with high performing Canola seeds
- Uplift seed care and crop protection in canola, cereals and pulse by providing alternative to competition

Why Canola seed is a critical factor

- Canola seed is the grower’s first decision
- Influences crop protection choices
- Impacts cereals decision

Total Syngenta incremental value: 2021

<table>
<thead>
<tr>
<th>Crop</th>
<th>Seed value</th>
<th>Seed care and crop protection</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canola</td>
<td>$50m</td>
<td>$20m</td>
<td>$70m</td>
</tr>
<tr>
<td>Cereals &amp; Pulse</td>
<td>$0.5m</td>
<td>$36.5</td>
<td>$37m</td>
</tr>
</tbody>
</table>

Source: Stratus Agri-marketing Inc. 2012, Syngenta analysis

*CRM: Client Relationship Management
Sugar beet
Sugar industry is a major influencer throughout value chain

Seed company
- Consolidated seed market
- Subject to official trials
- High technical requirements (R&D, supply chain and seed technology requirements)

Grower
- Early technology adopters
- High investment in crop
- Very profitable especially in Western Europe, USA
- Located in close proximity to sugar companies

Sugar company
- Consolidated market (majority are farmer co-operatives)
- Some active in other industries
- Direct seed purchase
- Fast yield increase requirements

Industry characteristics:
- Sophisticated R&D requirements
- Regulated and politicized
- Northern hemisphere self sufficiency concerns, quota system in US and EU

Source: USDA, Syngenta analysis
Complex hybrid development and registration process

Requirements of seed companies
- Agronomic and market understanding used to predict specific R&D targets for the future
- Commitment to invest in research and development

Hybrid registration process
- Controlled by authorities and sugar companies
- Varied criteria by country:
  - sugar yield and quality
  - emergence and plant population
  - pest and disease resistance
  - other characteristics (bolting)

Syngenta’s extensive network of field trialling and long experience leveraged to get our products effectively to market
Sugar beet: attractive profitability for growers

Example France: highest input and highest profit per hectare for growers

Seed, seed care and crop protection cost
- $155/ha $540/ha

Other fixed and variable costs*
- $600/ha $1260/ha

Crop yields
- 2.5 t/ha 85 t/ha

Farmer profit
- $495/ha $2620/ha

Seed care penetration
- 95% 95%

Fungicide use
- 5-10% 95%

Highly profitable but with limitations
- Sugar beet acreage is regulated and decreases as yield increases
- Crop rotation limits the farmer to 1 in 3 years
- Sugar beet requires high investment and technical knowledge

Inverse profitability ratio in Russia
- Ratio of profitability of sunflower to sugar beet in Russia is 3:1

* Includes fertilizers, fuel, labor and all other fixed and variable costs
Source: Syngenta analysis
Biotechnology adoption in sugar beet

Biotech introduction reshaped US market

US sugar beet market by product
$M

0 100 200 300
2007 2009 2012

GM introduced 2008

Seed care
Insecticides
Herbicides
Fungicides
Seed traits
Seeds &

GM penetration 0% 95% 95%

Seed care penetration 5% 45% 54%

Acreage -2%

RR trait benefit for grower
- Superior weed control
- 5% increase in yield and stability of crop
- Greater convenience and flexibility

Syngenta at forefront of biotech adoption
- Fast introduction of performing RR hybrids
- Leading role in RR US litigations
- Enabling biotech platforms

Opportunity in Russia and Ukraine
- Positive signs from governments regarding biotech adoption
- Genetics and weed pressure similar to the USA
- Very large farm sizes

Leverage US platform to drive growth in biotech segment

Source: USDA, Phillips McDougal, ISAAA, Syngenta analysis

Classification: PUBLIC
Technology leadership for ‘total nematode control’

Providing an integrated approach

- Currently only genetics can provide nematode control
- Hybrids are partially resistant but not sustainable as it multiplies the nematode population
- Limited ability to measure yield loss impact

10-80% yield loss*

Global sugar beet seeds market $m

<table>
<thead>
<tr>
<th>Nematode market segment</th>
<th>2012</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>900</td>
<td>100</td>
</tr>
<tr>
<td>20%</td>
<td>1100</td>
<td>200</td>
</tr>
</tbody>
</table>

Nematode infected area

- 0.5 Mha (10% of global acreage) **Heavy infection**
- 0.8 Mha (16% of global acreage) **Low infection**

Seed: Resistant or tolerant high performing hybrids

Seed care: **new nematode solution**

Crop protection: Development compound (pipeline)

Crop rotation: Optimized agronomic practices

* Depending on the type of nematode infection  **Expected launch 2015

** Includes rhizomania, rhizoctonia, cercospora, aphenomyces

Source: Institute of Agriculture and Natural Resources - Nebraska
Successful integration of Maribo acquisition

Acquisition of Maribo in 2010

- ~$50m annual sales
- Sales footprint and expertise across Europe
- Top class processing facilities

Smooth integration while leveraging a dual brand strategy

- Achieved efficiencies: back-office and supply chain fully integrated
- Preserved sales: successful dual-brand strategy
- Redesigned supply chain: transformed the plant in Denmark into a multi-crop processing plant
- Leveraged Maribo brand and expertise to expand into new geographies:
  - China, Turkey, Moldova, Azerbaijan
  - US (2014)

Holeby, Denmark
Diverse Field Crops pipeline

2012 sales: $1.3bn

2015 sales: ~$1.5bn

2020 sales: >$2.2bn

- X-crop rotation solutions
- Targeted chemical-genetic interaction
- Next generation herbicide tolerance
- New seed care delivery systems
- Wild trait introgression

- Total control solutions: broomrape, nematodes, Rhizoctonia, Phoma
- New launches: AMISTAR TOP®, CLARIVA®

- Enhanced root health: VIBRANCE®
- New launches: PLENUM®, TOPREX®, LISTEGO®, CAPTORA®, SYMETRA®

- Crop vigor and plant establishment: CRUISER®, HELIX XTRA®, FORCE® MAGNA

- Selective, non-selective herbicide portfolio: DUAL GOLD®, REGLONE®, FUSILADE®, TOUCHDOWN®, COLZOR® TRIO

- High-value hybrids: NK®, SYNGENTA®, SPS®, MARIBO®, HILLESÍÖG®

- Trait launches: Clearfield® Plus*

- Integrated solutions
- Crop protection
- Seeds

* Clearfield® is a registered trademark of BASF
DFC integrated offers: delivering business growth from $1.3bn to $2.2bn

Drive leadership, achieve scale and grow profitably

+$1bn growth by 2020

2012

$0.5bn

Shaping the crop: health & sustainability

Innovating in weed management solutions

Driving technology adoption in Russia and Ukraine

Supply chain excellence

2020

$1.2bn

$0.5bn

Thinking holistically: Total Farm Approach, Canada

New chemistry launches to address resistance issues

Total control solutions

Addressing value chain challenges
CIS Overview

July 9, 2013

Presented by:
Alexander Berkovskiy
Welcome to Krasnodar

- Population: 1 million
- Arable land: ~4 Mha
- Agriculture 12.6% of gross regional output
- Traditional breadbasket region of Russia
- Favorable weather conditions and highly fertile soil
- Most advanced growers, highest level of technology adoption
- Major transportation hub servicing three corridors: Mediterranean, Middle East, Central Asia
- Center of investments into Russian agriculture
Agriculture: key role in the CIS economy

Russia
- ~9% of world’s arable land
- 26% of world’s most fertile soil
- Self-sufficiency doctrine driving production
- Increasing government support - subsidies
- Continuing investments into infrastructure

Agriculture as % of GDP

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop</td>
<td>5.6%</td>
<td>5.8%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Livestock</td>
<td>46%</td>
<td>54%</td>
<td></td>
</tr>
</tbody>
</table>

Ukraine
- Agriculture contributes >10% of GDP
- Agricultural exports support trade balance
- Ideal geographic position for trading
- Local food consumption will double in 5 years
- State programs to develop local production

Agriculture as % of GDP

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop</td>
<td>7.5%</td>
<td>8.3%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Livestock</td>
<td>36%</td>
<td>64%</td>
<td></td>
</tr>
</tbody>
</table>

Source: World Bank, CIS Statistic Service Agencies
Russia: local consumption and exports driving growth

**Official development objectives**

<table>
<thead>
<tr>
<th>Production index</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>140</td>
</tr>
<tr>
<td>120</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>40</td>
</tr>
</tbody>
</table>

- **Targeted production increases by 2020:**
  - Grain production: +30% to 115Mt
    - yield increase
    - access to export markets in Asia
- **Livestock, poultry:** +20% to 14.1Mt
  - strong domestic demand
  - import substitution
- **Milk production:** +18% to 38.3Mt
  - foreign investments
  - cheese and butter production

Ukraine: growth potential stimulating foreign investment

Co-operation with China
- 2013: $600m investments
- Long-term investment potential: >$6bn

EBRD investment
- 2012: >€180m
- Plan for 2013: >€300m

Source: Government statistics, EBRD
CIS vs. EU: higher acreage but lower productivity

- Yield differences reflect low CIS intensity
- Intensification driving higher ROI
- Increasing meat production fuels demand for grain
- Grain exports expected to grow

### Wheat

<table>
<thead>
<tr>
<th></th>
<th>CIS</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield t/ha</td>
<td>1.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Area Mha</td>
<td>46</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: Syngenta estimates

### Corn

<table>
<thead>
<tr>
<th></th>
<th>CIS</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield t/ha</td>
<td>4.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Area Mha</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

### Sunflower

<table>
<thead>
<tr>
<th></th>
<th>CIS</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield t/ha</td>
<td>1.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Area Mha</td>
<td>13</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Syngenta estimates
Syngenta: strong position in oilseeds

- Cereals: remains largest crop, reinforced by export ambition
- Oilseeds: high grower profitability
- Corn: driven by livestock development, shift to high-value seeds
- Sugar beet: self-sufficiency achieved through investment; further technification opportunities exist
- Vegetables: market industrialization, multinational processors
- Others: promising soybean opportunity

Crop protection and seeds market
CIS, 2012

Source: Syngenta estimates for CIS
CIS: a transformational decade

Syngenta market leadership driven by broad portfolio

> 850 employees in 2013 (doubled since 2007)

Emergence of leading seeds technology

Sales by country

Sales by business

CAGR: 23%

CAGR: 23%

CAGR: 22%

CAGR: 32%

CAGR: 8%

CAGR: 43%

CAGR: 17%

2002 2012

Rest of CIS

Ukraine

Russia

Seeds

Crop Protection

> 850 employees in 2013 (doubled since 2007)

Emergence of leading seeds technology

Syngenta market leadership driven by broad portfolio

CAGR: 23%

CAGR: 23%

CAGR: 22%

CAGR: 32%

CAGR: 8%

CAGR: 43%

CAGR: 17%

2002 2012

Rest of CIS

Ukraine

Russia

Seeds

Crop Protection
Driving the agricultural agenda – on farm and beyond

- Broad territory coverage: >500 people on the ground
- Technology adaptation directly on farm
- Full range covering key crops
- Supply responsiveness
- Credit risk management

Crop protection and seeds market
CIS, 2012

- Syngenta 22%
- BASF
- Bayer
- DuPont/Pioneer
- Others
## Russia: customer segmentation

<table>
<thead>
<tr>
<th>East</th>
<th># of farms in segment</th>
<th>Arable land, '000s ha</th>
<th>Average land per farm '000s ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large agro holdings</td>
<td>60</td>
<td>6,000</td>
<td>100</td>
</tr>
<tr>
<td>Other agro holdings, large &amp; medium high intensity farms</td>
<td>1,000</td>
<td>18,000</td>
<td>18</td>
</tr>
<tr>
<td>Small farms and private farmers</td>
<td>4,000</td>
<td>8,000</td>
<td>2</td>
</tr>
</tbody>
</table>

### South

<table>
<thead>
<tr>
<th># of farms in segment</th>
<th>Arable land, '000s ha</th>
<th>Average land per farm '000s ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large agro holdings</td>
<td>80</td>
<td>3,400</td>
</tr>
<tr>
<td>Other agro holdings, large &amp; medium high intensity farms</td>
<td>400</td>
<td>4,500</td>
</tr>
<tr>
<td>Small farms and private farmers</td>
<td>600</td>
<td>1,100</td>
</tr>
</tbody>
</table>

- Differentiated GTM strategy for each segment
- F2F approach for agro-holdings and selected large farms

Source: Syngenta estimates
Diverse portfolio: strong position across all crops

Syngenta 2012 market share in the CIS

### Cereals
- **Crop Protection**: 21%
- **Seeds**: 24%
  - CP share gain: Thiamethoxam expansion, DAS portfolio
  - Entry into seeds

### Corn
- **Crop Protection**: 24%
- **Seeds**: 12%
  - New CP sub-markets
  - Early-planting technology
  - New high performing hybrids

### DFC
- **Crop Protection**: 20%
- **Seeds**: 31%
  - Full IMI offer in sunflower
  - High oleic segment
  - Addressing new challenges in sugar beet

### Vegetables/Specialty
- **Crop Protection**: 27%
- **Seeds**: 7%
  - Integrated solutions
  - Expansion in Central Asia and Caucasus

Source: Syngenta estimates
Local R&D is a key enabler for crop strategies

- Products adapted to diverse soil and climatic conditions
- Development of highly skilled R&D staff
- Co-operation with local scientists
- Planning to double employees to >100 by 2015
- Total infrastructure investments:
  - Russia: $23m
  - Ukraine: $20m
# New integrated approach focused on grower needs

<table>
<thead>
<tr>
<th>Go to Market strategy</th>
<th>Sales force</th>
<th>Crop focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demand creation on farm</td>
<td>• Integrated sales force offering full portfolio</td>
<td>• Integrated crop marketing campaigns</td>
</tr>
<tr>
<td>• Integrated channel partners selling full portfolio</td>
<td>• Single face to the customer</td>
<td>• Portfolio meeting grower needs</td>
</tr>
<tr>
<td>• Integrated commercial &amp; pricing policy</td>
<td>• Capability to sell complete solutions</td>
<td>• Technology innovation</td>
</tr>
</tbody>
</table>

## Key facts
- Russia example:
  - > 2000 F2F farms
  - ~ 25 farms per Demand Creator
  - > 1000 visits per month
  - > 50% of sales covered by F2F

- Demand Creators with strong agronomic knowledge
- Intensive training for Field Force
- >$2m investments across CIS
- CRM roll-out

- Crop marketing campaigns deliver extra sales in 2012:
  - cereal herbicides: +$10m
  - CRUISER sunflower: +$8m
  - seed care: +$5m

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  - CRUISER sunflower: +$8m
  - seed care: +$5m
Integration accelerates growth in Ukraine

- Early integration via prototyping
- Full portfolio adapted to local needs
- Sales force efficiency
- Supply responsiveness
- Staff up-skilling

Ukraine sales evolution

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>34</td>
</tr>
<tr>
<td>2005</td>
<td>8</td>
</tr>
<tr>
<td>2006</td>
<td>14</td>
</tr>
<tr>
<td>2007</td>
<td>20</td>
</tr>
<tr>
<td>2008</td>
<td>50 (57)</td>
</tr>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>46</td>
</tr>
<tr>
<td>2011</td>
<td>97</td>
</tr>
<tr>
<td>2012</td>
<td>87</td>
</tr>
<tr>
<td>Total</td>
<td>299</td>
</tr>
</tbody>
</table>
Long term target: 2020 sales $1.5bn

CIS sales by business
$m

CAGR: 9%

- Cereals: seeds footprint expansion, seed care and fungicide intensification
- Corn: introduction of new adapted varieties
- Sugar beet: increasing seed care penetration, meeting rhizoctonia challenge
- Oilseeds: leveraging seeds strength, realizing yield potential
Bringing plant potential to life