

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE
SECURITIES EXCHANGE ACT OF 1934
OR
 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2015
OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934
OR
 SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Commission file number: 1-15152

SYNGENTA AG

(Exact name of Registrant as specified in its charter)

Switzerland

(Jurisdiction of incorporation or organization)

Schwarzwaldallee 215, 4058 Basel, Switzerland

(Address of principal executive offices)

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Syngenta International AG

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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
American Depositary Shares, each representing one-fifth of a common share of Syngenta AG, nominal value CHF 0.10	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

92,945,649 Common shares, nominal value CHF 0.10 each

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board

Other

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

Introduction

NATURE OF OPERATIONS

Syngenta AG (“Syngenta” or the “Company”) is a world leading agribusiness operating in the crop protection and seeds business, which is involved in the discovery, development, manufacture and marketing of a range of products designed to improve crop yields and food quality, and in the lawn and garden business, which provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

Syngenta is headquartered in Basel, Switzerland and was formed by Novartis AG (“Novartis”) and AstraZeneca PLC (“AstraZeneca”) in November 2000 through an agreement to spin off and merge the Novartis crop protection and seeds businesses with the AstraZeneca agrochemicals business to create a dedicated agribusiness company whose shares were then the subject of a global offering (the “Transactions”). The Transactions were completed on November 13, 2000.

FORWARD-LOOKING STATEMENTS

The statements contained in this annual report that are not historical facts, including, without limitation, statements regarding management’s expectations, targets or intentions, including for sales, earnings and earnings per share, constitute forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, and are based on the current expectations and estimates of Syngenta’s management. Investors are cautioned that such forward-looking statements involve risks and uncertainties, and that actual results may differ materially.

Syngenta identifies the forward-looking statements in this annual report by using the words “expect”, “would”, “will”, “potential”, “plans”, “prospects”, “anticipates”, “estimated”, “believes”, “intends”, “aiming”, “on track”, or similar expressions, or the negative of these expressions. Syngenta cannot guarantee that any of the events or trends anticipated by the forward-looking statements will actually occur. Important factors that could cause actual results to differ materially from the results anticipated in the forward-looking statements include, among other things:

- the risk that research and development will not yield new products that achieve commercial success;
- the risk that Syngenta will not be able to obtain or maintain the necessary regulatory approvals for its business;
- the risk that economic and/or financial market weakness may have a material adverse effect on Syngenta’s results and financial position;
- the risks associated with increasing competition in the industry;
- the risk that customers will be unable to pay their debts to Syngenta due to economic conditions;
- the risks associated with potential changes in policies of governments and international organizations;
- the risks associated with exposure to liabilities resulting from environmental and health and safety laws;
- the risk that important patents and other intellectual property rights may be challenged or used by other parties;
- the risk that Syngenta may encounter problems when implementing significant organizational changes;
- the risks associated with the proposal by China National Chemical Corporation to acquire Syngenta;
- the risk that the value of Syngenta’s intangible assets may become impaired;

- the risk of substantial product liability or personal injury claims;
- the risk that consumer resistance to genetically modified crops and organisms or crop protection chemicals may negatively impact sales;
- the risks associated with climatic variations;
- the risks associated with exposure to fluctuations in foreign currency exchange rates or commodity prices;
- the risks associated with entering into single-source supply arrangements;
- the risks associated with conducting operations in certain territories that have been identified by the US government as state sponsors of terrorism;
- the risks associated with natural disasters;
- the risk that Syngenta's effective tax rate may increase; and
- the risk of significant breaches of data security or disruptions of information technology systems.

Some of these factors are discussed in more detail herein, including under Item 3 "Key Information", Item 4 "Information on the Company", and Item 5 "Operating and Financial Review and Prospects". Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Syngenta does not intend or assume any obligation to update these forward-looking statements.

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PART I

ITEM 1 — IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2 — OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3 — KEY INFORMATION

Selected Financial Data

Syngenta has prepared the consolidated financial statements in US dollars (\$) and in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS). Financial figures are presented in millions of dollars (\$m) except where otherwise stated. The basis of preparation of the consolidated financial statements and the key accounting policies are discussed in Note 1 and in Notes 2 and 29, respectively, to the consolidated financial statements in Item 18.

The selected financial highlights information in accordance with IFRS presented below has been extracted from the consolidated financial statements of Syngenta. Investors should read the entire consolidated financial statements and not rely on the summarized information. The information includes the results of operations and the net assets of Agrosan S.A. from March 9, 2011, Pasteuria Bioscience Inc. from November 8, 2012, Sunfield Seeds Inc. from November 29, 2012, Devgen N.V. from December 12, 2012, MRI Seed Zambia Ltd and MRI Agro Zambia Ltd from October 31, 2013, Società Produttori Sementi S.p.A. from April 4, 2014, Lantmännen SW Seed Hadmersleben GmbH, Lantmännen SW Seeds GmbH and SW Winter Oilseed AB from July 21, 2014 and Land.db Enterprises Inc. from October 15, 2015. For further information about these acquisitions, see Note 3 to the consolidated financial statements in Item 18.

Financial highlights

	Year ended December 31,				
(\$m, except where otherwise stated)	2015	2014	2013	2012	2011
Amounts in accordance with IFRS					
Income statement data:					
Sales	13,411	15,134	14,688	14,202	13,268
Cost of goods sold	(7,042)	(8,192)	(7,986)	(7,223)	(6,790)
Gross profit	6,369	6,942	6,702	6,979	6,478
Operating expenses	(4,528)	(4,837)	(4,616)	(4,723)	(4,469)
Operating income	1,841	2,105	2,086	2,256	2,009
Income before taxes	1,592	1,895	1,934	2,116	1,859
Net income	1,344	1,622	1,649	1,850	1,570
Net income attributable to Syngenta AG shareholders	1,339	1,619	1,644	1,847	1,569
Number of shares – basic	91,908,128	91,674,127	91,952,222	91,644,190	91,892,275
Number of shares – diluted	92,206,535	92,007,089	92,459,306	92,132,922	92,383,611
Basic earnings per share (\$)	14.57	17.66	17.88	20.16	17.07
Diluted earnings per share (\$)	14.52	17.60	17.78	20.05	16.98
Cash dividends paid:					
Swiss franc (“CHF”) per share	11.00	10.00	9.50	8.00	7.00
\$ per share equivalent	11.73	11.25	10.01	8.82	7.64
Cash flow data:					
Cash flow from operating activities	1,190	1,931	1,214	1,359	1,871
Cash flow used for investing activities	(462)	(729)	(772)	(1,218)	(472)
Cash flow used for financing activities	(1,188)	(420)	(1,114)	(232)	(1,684)
Capital expenditure on tangible fixed assets	(453)	(600)	(625)	(508)	(479)
Balance sheet data:					
Current assets less current liabilities	5,537	4,858	3,990	4,537	4,107
Total assets	18,977	19,929	20,216	19,438	17,241
Total non-current liabilities	(4,896)	(4,317)	(3,356)	(4,226)	(4,063)
Total liabilities	(10,557)	(11,024)	(10,712)	(10,653)	(9,706)
Share capital	(6)	(6)	(6)	(6)	(6)
Total shareholders' equity	(8,401)	(8,889)	(9,491)	(8,774)	(7,526)
Other supplementary income data:					
Diluted earnings per share from continuing operations, excluding restructuring and impairment (\$) ¹	17.78	19.42	19.30	22.03	19.03

All activities were in respect of continuing operations.

Notes

1 Diluted earnings per share from continuing operations, excluding restructuring and impairment is a non-GAAP measure.

A non-GAAP measure is a numerical measure of financial performance, financial position or cash flow that either:

- includes, or is subject to adjustments that have the effect of including, amounts that are excluded in the most directly comparable measure calculated and presented under IFRS, or
- excludes, or is subject to adjustments that have the effect of excluding, amounts that are included in the most directly comparable measure calculated and presented under IFRS.

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the effects of analyzing and preparing for potential industry consolidation transactions as well as completing and integrating significant business combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded. Impairment includes impairment losses associated with major restructuring as well as impairment losses and reversals of impairment losses resulting from major changes in the markets in which a reported segment operates.

Further discussion on the reason for including disclosure of this and other non-GAAP measures is included in Appendix A at the end of the Operating and Financial Review and Prospects in Item 5.

Restructuring and impairment charges for 2015, 2014 and 2013 are analyzed in Note 6 to the consolidated financial statements in Item 18. Restructuring for 2012 and 2011 partly related to the program announced in 2011 to integrate global commercial operations for Crop Protection and Seeds in order to enable operational synergies from the commercial integration, additional cost savings from procurement and supply chain efficiencies and the presentation of an integrated offer to growers. Restructuring for 2012 and 2011 also related to the Operational Efficiency program announced in 2004 representing the costs of closure of certain manufacturing and research and development sites and refocusing of other continuing sites and also to the further phase of the Operational Efficiency program announced in 2007 to drive cost savings to offset increased expenditure in research and technology, marketing and product development in the growth areas of Seeds, professional products and emerging country markets.

A detailed reconciliation of net income and earnings per share before restructuring and impairment to net income and earnings per share according to IFRS is presented in Appendix A at the end of the Operating and Financial Review and Prospects in Item 5.

Risk Factors

Syngenta's business, financial condition, results of operations or cash flows could suffer material adverse effects due to any of the following risks. Risks that are considered to be material are described below.

The resources Syngenta devotes to research and development may not result in commercially viable products

Syngenta's success depends in part on its ability to develop new products. Research and development in the agribusiness industry is expensive and prolonged, and entails considerable uncertainty. The process of developing a novel crop protection product, plant variety or trait typically takes around ten years or more from discovery through testing and registration to initial product launch; this period varies considerably from product to product and country to country. Because of the stringent product performance and safety criteria applied in product development, compounds or biotechnological products currently under development may neither survive the development process nor ultimately receive the requisite regulatory approvals needed to market such products. Even when such approvals are obtained, there can be no assurance that a new product will be commercially successful. In addition, research undertaken by competitors may lead to the launch of competing or improved products, which may affect sales of Syngenta's new products.

Syngenta may not be able to obtain or maintain the necessary regulatory approvals for some of its products, which could restrict its ability to sell those products in some markets

Syngenta's products must receive regulatory approval before they can be marketed, but Syngenta may not be able to obtain such approvals. In most markets, including the United States and the European Union, crop protection products must be registered after being tested for safety, efficacy and environmental impact. In most of Syngenta's principal markets, after a period of time, Syngenta must also re-register its crop protection products and show that they meet all current standards, which may have become more stringent since the prior registration. For seeds products, in the European Union, a new plant variety will be registered only after it has been shown that it is distinct, uniform, stable and better than existing varieties. Delays in obtaining regulatory approvals to import crops grown from seed containing certain traits may influence the rate of adoption of new genetically modified products in globally traded crops. For further information regarding the impact on Syngenta of delays in obtaining regulatory approvals, see Note 25 to the consolidated financial statements in Item 18.

Regulatory standards and trial procedures are continuously changing. Responding to these changes and meeting existing and new requirements may be costly and burdensome. In addition, changing regulatory standards may affect Syngenta's ability to maintain its products on the market.

Economic and/or financial market weakness may have a material adverse effect on Syngenta's results and financial position

Commodity crop prices have historically been volatile and downturns in prices can indirectly affect Syngenta's results by adversely affecting the income and financial position of Syngenta's customers and of the users of Syngenta's products. This may result in reduced sales, competitive price pressure in Syngenta's markets and in slower collection of accounts receivable. A low availability of credit may also limit the amount of business Syngenta's customers and suppliers can transact with Syngenta, including customers and suppliers in parts of the Eurozone, CIS and Latin America, which are experiencing economic problems. These occurrences may negatively impact Syngenta's business, results of operations or cash flows. Because of the high proportion of costs which are fixed in nature, Syngenta may not be able to compensate fully for these effects in the short term through measures such as reducing expenses.

While Syngenta views its current credit facilities and ability to access capital markets as adequate for its needs, difficulties in the banking sector in the future or illiquidity in the credit or capital markets may restrict Syngenta's ability to raise additional funds or increase the cost of such funding.

Significant declines in asset prices or changes to long-term assumptions may cause funding levels in Syngenta's externally funded defined benefit pension plans to fall below stipulated regulatory levels. This may require Syngenta to pay additional contributions to restore funding to required levels. Please see Notes 2 and 22 to the consolidated financial statements in Item 18 for further information about Syngenta's defined benefit pension plans and the assumptions used to measure the related pension liabilities.

Syngenta participates in an industry that is highly competitive and undergoing consolidation, which could increase competitive pressures

Syngenta currently faces significant competition in the markets in which it operates. In most segments of the market, the number of products available to the grower is steadily increasing as new products are introduced, although this trend can be partly offset by the withdrawal of some products because they are not re-registered or are subject to voluntary range reduction programs. At the same time, certain products are coming off patent and are thus available to generic manufacturers for production. As a result, Syngenta anticipates that it will continue to face significant competitive challenges.

The agribusiness industry has a long history of consolidation, and further consolidation is ongoing and could continue to occur, which may intensify competition for Syngenta. Syngenta's competitive position could suffer to the extent it is not able to expand its own resources either through consolidations, acquisitions, joint ventures or partnerships. For information on a proposal by China National Chemical Corporation (ChemChina) to acquire 100 percent of the ordinary shares of Syngenta AG through a tender offer to shareholders, see History and Development of the Company in Item 4 and Note 30 to the consolidated financial statements in Item 18. In the future, Syngenta may not be able to find suitable companies to combine with, assets to purchase or joint venture or partnership opportunities to pursue. Even if Syngenta is able to identify desirable opportunities, it may not be able to enter into transactions on economically acceptable terms. If Syngenta does not successfully participate in continuing industry consolidation, its ability to compete successfully could be adversely affected and result in the loss of customers or an uncompetitive cost structure, which could adversely affect its sales and profitability.

Syngenta's customers may be unable to pay their debts to Syngenta due to economic conditions

Normally Syngenta delivers its products against future payment. Syngenta's credit terms vary according to local market practice, with credit terms for customers typically ranging from 30 to 180 days, except for customers in some emerging markets, where credit terms may range from cash on delivery to, in certain cases, 360 days. Syngenta's customers, particularly in developing economies and in economies experiencing an economic downturn, may be exposed to business, political or financial conditions impacting their ability to pay their debts, which could adversely affect Syngenta's results. While Syngenta uses barter and other security arrangements to reduce customer credit exposure in some emerging markets, it may still be exposed to risk of material losses from its credit exposure in these markets. For further information regarding Syngenta's exposure to losses due to economic conditions in certain geographic regions and the measures Syngenta is taking to limit this exposure, see Item 5 – Operating and Financial Review and Prospects – Foreign operations and foreign currency transactions.

Changes in agricultural and certain other policies of governments and international organizations may prove unfavorable

In many markets there are various pressures to reduce subsidies to growers, which may inhibit the growth in these markets of products used in agriculture. In addition, changes in governmental policies that impact agriculture may similarly inhibit the growth of markets for products used in agriculture. However, it is difficult to predict accurately whether, and if so when, such changes will occur. Syngenta expects that the policies of governments and international organizations will continue to affect the income available to growers to purchase products used in agriculture and, accordingly, the operating results of the agribusiness industry.

Syngenta is subject to stringent environmental, health and safety laws, regulations and standards, which can result in compliance costs and remediation efforts that may adversely affect its operational and financial position

Syngenta is subject to a broad range of increasingly stringent laws, regulations and standards in all of its operational jurisdictions. This results in significant compliance costs and can expose Syngenta to legal liability. These requirements are comprehensive and cover many activities including: air emissions, waste water discharges, the use and handling of hazardous materials, waste disposal practices, the clean-up of existing environmental contamination and the use of chemicals and genetically modified seeds by growers.

Environmental and health and safety laws, regulations and standards expose Syngenta to the risk of substantial costs and liabilities, including liabilities associated with assets that have been sold and activities that have been discontinued. In addition, many of Syngenta's manufacturing sites have a long history of industrial use. As is typical for businesses like Syngenta's, soil and groundwater contamination has occurred in the past at some sites, and may be identified at other sites in the future. Disposal of waste from its business at off-site locations also exposes Syngenta to potential remediation costs. Consistent with past practice, Syngenta is continuing to monitor, investigate and remediate soil and groundwater contamination at a number of these sites. Despite its efforts to comply with environmental laws, Syngenta may face remediation liabilities and legal proceedings concerning environmental matters.

Based on information presently available, Syngenta has budgeted expenditures for environmental improvement projects and has established provisions for known environmental remediation liabilities that are probable and capable of estimation. However, it cannot predict environmental matters with certainty, and the budgeted amounts and established provisions may not be adequate for all purposes. In addition, the development or discovery of new facts, events, circumstances, changes in law or conditions, including future decisions to close plants which may trigger remediation liabilities, could result in increased costs and liabilities or prevent or restrict some of Syngenta's operations.

Efforts by Syngenta to protect its intellectual property rights or defend against claims asserting that Syngenta has infringed the intellectual property rights of others may be unsuccessful

Scientific and technological innovation is critical to the long-term success of Syngenta's businesses. However, third parties may challenge the measures that Syngenta takes to protect processes, compounds, organisms and methods of use through patents and other intellectual property rights and, as a result, Syngenta's products may not always have the full benefit of intellectual property rights. In addition, while Syngenta takes steps to prevent unauthorized access to and distribution of its intellectual property, it cannot ensure that unauthorized parties do not obtain access to and use such property.

Third parties may also claim that Syngenta's products violate their intellectual property rights. Defending such claims, even those without merit, could be time-consuming and expensive. In addition, any such claim could also result in Syngenta having to enter into license arrangements, develop non-infringing products or engage in litigation that could be costly.

Legislation and jurisprudence on patent protection in major markets such as the United States and the European Union is evolving and changes in laws could affect Syngenta's ability to obtain or maintain patent protection for its products.

Problems encountered by Syngenta when implementing significant organizational changes could adversely affect the future performance of the Company

Syngenta expects to continue to engage in restructuring activities to reduce operating costs, increase sales, or both. In addition, Syngenta may acquire or dispose of significant businesses, which would necessitate restructuring its operations. Syngenta may fail to adequately implement such restructuring activities in the manner contemplated, which could cause the restructuring activities to fail to achieve the desired results. Even if Syngenta does implement the restructuring activities in the manner contemplated, they may not produce the desired results. Accordingly, such restructuring activities may not reduce operating costs or increase sales, or may impact Syngenta's ability to attract and retain key talent. Failure to adequately implement significant restructuring activities could have a material adverse effect on Syngenta's business and consequently impact its financial position, results of operations and cash flows. For information on restructuring activities currently occurring at Syngenta, see Restructuring programs in Item 5 and Note 6 to the consolidated financial statements in Item 18.

The China National Chemical Corporation ("ChemChina") tender offer and related matters could cause disruptions to Syngenta's business or business relationships, or otherwise have an adverse impact on it

On February 2, 2016, Syngenta entered into a definitive agreement (the "Transaction Agreement") with ChemChina and China National Agrochemical Corporation, pursuant to which ChemChina agreed to cause a newly-incorporated company that is directly or indirectly controlled by ChemChina (the "Offeror") to submit a tender offer for all publicly held ordinary shares of Syngenta and American Depositary Shares ("ADSs") of Syngenta issued by the Bank of New York Mellon as depository (the "ChemChina Tender Offer"). Under the terms of the Transaction Agreement, which was unanimously approved by Syngenta's Board of Directors, the Offeror will offer the shareholders of Syngenta \$465 per ordinary share, to be paid in cash, plus allow a special dividend of CHF 5 to be paid by Syngenta conditional upon and prior to closing. For more details on the ChemChina Tender Offer, please see "Item 4. Information on the Company—History and Development of the Company—Investments and Divestments" and "Item 5. Operating and Financial Review and Prospects—Trend and Outlook—ChemChina Tender Offer." The Transaction Agreement, the ChemChina Tender Offer, and related matters could cause disruptions to Syngenta's business or business relationships, or otherwise have an adverse impact on it. For example:

- The attention of Syngenta's management may be directed to ChemChina Tender Offer-related considerations and may be diverted from day-to-day operations of Syngenta's business.
- Syngenta's employees or potential employees may experience uncertainty about their future roles with Syngenta, which might adversely affect Syngenta's ability to retain and hire key personnel and other employees.
- Customers, suppliers or other parties with which Syngenta maintains business relationships may seek alternative relationships with third parties or seek to alter their business relationship with Syngenta.
- Syngenta has incurred, and will likely continue to incur, costs, expenses and fees for professional services and other transaction-related costs.
- Syngenta may be subject to legal or regulatory proceedings in connection with the ChemChina Tender Offer. Following the announcement of merger proposals, securities class action litigation is often brought against a company and its board of directors. Similar lawsuits may be filed against Syngenta related to the ChemChina Tender Offer and, if successful, could prevent the ChemChina Tender Offer from being completed within the expected timeframe or at all.
- Syngenta may experience a downgrade in its credit ratings as a result of the ChemChina Tender Offer, and any such downgrade could increase its costs of accessing funds in the debt and capital markets.

Syngenta can provide no assurance that the ChemChina Tender Offer will be consummated or consummated in the timeframe or manner currently anticipated

There are a number of conditions to the ChemChina Tender Offer. In particular, the offer is contingent upon acceptance by shareholders and holders of ADSs owning in aggregate 67 percent of Syngenta's issued shares (including shares represented by ADSs) and the fulfillment of all necessary regulatory approvals, and Syngenta cannot provide assurance that either will occur. If the offer is not completed, the price of Syngenta's ordinary shares may change to the extent that the current market price of Syngenta's ordinary shares may reflect an assumption that the ChemChina Tender Offer will be consummated. Pending the closing of the ChemChina Tender Offer, the Transaction Agreement also restricts Syngenta from engaging in certain actions without ChemChina's consent, which could prevent Syngenta from pursuing opportunities that may arise prior to the closing of the ChemChina Tender Offer. Any delay in closing or a failure to close could have a negative impact on Syngenta's business and stock price as well as its relationships with its customers, vendors or employees, as well as a negative impact on Syngenta's ability to pursue alternative strategic transactions and/or its ability to implement alternative business plans. In addition, if the ChemChina Tender Offer is not successful or does not become unconditional under certain circumstances, including, among others, for a reason attributable to (i) a material breach by Syngenta of the Transaction Agreement, (ii) the withdrawal or modification by Syngenta's Board of Directors of its recommendation for the ChemChina Tender Offer contemplated in the Transaction Agreement, (iii) the entry by Syngenta into, or the recommendation by its Board of, an alternative transaction or (iv) the public announcement of an alternative transaction prior to the termination of the Transaction Agreement and Syngenta entering into a definitive agreement relating to such alternative transaction within 12 months of such termination and such alternative transaction being consummated, Syngenta may be required to pay a termination fee of \$1.5 billion.

Syngenta will likely incur additional debt in connection with the ChemChina Tender Offer

In connection with the ChemChina Tender Offer, Syngenta will likely incur additional indebtedness as part of ChemChina's financing of the acquisition, although the amount would be limited as described under "Item 5. Operating and Financial Review and Prospects—Trend and Outlook—ChemChina Tender Offer." Syngenta's ability to pay or to refinance such indebtedness will depend upon its future operating performance, which will be affected by general economic, financial, competitive, legislative, regulatory, business and other factors beyond its control. See "Item 5. Operating and Financial Review and Prospects—Liquidity and capital resources." A higher amount of indebtedness may impair Syngenta's ability to obtain additional financing and pursue business opportunities, increase Syngenta's vulnerability to general economic and industry conditions and place it at a competitive disadvantage to competitors who are not as highly leveraged.

In addition, certain of Syngenta's existing debt could be subject to repayment upon a change of control. If Syngenta is unable to refinance any such debt obligations, it could be in default under the terms of the agreements governing such indebtedness, and the holders of such indebtedness could elect to declare all the funds borrowed thereunder to be due and payable, together with accrued and unpaid interest.

The value of Syngenta's intangible assets, including goodwill arising from acquisitions, may become impaired

Syngenta has a significant amount of intangible assets, including goodwill, on its consolidated balance sheet and, if it continues to acquire businesses in the future, may record significant additional intangible assets and goodwill. As described in Note 2 and 29 to the consolidated financial statements in Item 18, Syngenta regularly tests its intangible assets for impairment. Upon completing its testing for 2015, which included subjecting the assumptions used in the testing to a sensitivity analysis, Syngenta concluded that no material intangible assets are impaired at December 31, 2015. However, unforeseen events that occur in the future may result in actual future cash flows for Syngenta's businesses being different from those forecasted. As a consequence, Syngenta's intangible assets could become impaired and the resulting impairment losses could have a material adverse impact on Syngenta's financial position and results of operations.

Syngenta may be required to pay substantial damages as a result of product liability or personal injury claims for which insurance coverage is not available

Product liability and personal injury claims are a commercial risk for Syngenta, particularly as it is involved in the supply of chemical products which can be harmful to humans and the environment. Courts have levied substantial damages in the United States and elsewhere against a number of companies in the agribusiness industry in past years based upon claims for injuries allegedly caused by the use of their products. While a global insurance program is in place, a substantial product liability or personal injury claim that is not covered fully or at all by insurance could have a material adverse effect on Syngenta's operating results or financial condition. For further information regarding claims against Syngenta, see Note 25 to the consolidated financial statements in Item 18.

Consumer and government resistance to genetically modified organisms or crop protection chemicals may negatively affect Syngenta's public image and reduce sales

Syngenta is active in the field of genetically modified organisms in the seeds area and in biotechnology research and development in seeds and crop protection. However, the high public profile of biotechnology and lack of consumer acceptance of products to which Syngenta has devoted substantial resources could negatively affect its public image and results. The current resistance from consumer groups, particularly in Europe, to products based on genetically modified organisms, because of concerns over their effects on food safety and the environment, may spread to and influence the acceptance of products developed through biotechnology in other regions of the world, which could limit the commercial opportunities to exploit biotechnology.

Syngenta also produces and markets crop protection chemical products, some of which are facing increasing resistance from consumer groups because of concerns over their alleged effects on food safety and the environment. These consumer groups oftentimes attempt to influence governmental regulatory bodies to restrict the use of crop protection chemical products in their jurisdictions.

Actions by consumer groups and others may disrupt research and development or production of genetically modified seeds or crop protection chemicals. In addition, some government authorities have enacted, and others in the future might enact, regulations regarding genetically modified organisms or crop protection chemicals, which may delay and limit or even prohibit the development and sale of such products.

Syngenta's results may be affected by climatic variations

The agribusiness industry is subject to seasonal and weather factors, which make its operations relatively unpredictable from period to period. The weather can affect the presence of disease and pests in the short term on a regional basis and, accordingly, can affect the demand for crop protection products and the mix of products used (positively or negatively). The weather also can affect the quality, volume and cost of seeds produced for sale. Seed yields can be higher or lower than planned and significantly higher yields could lead to Syngenta purchasing more seeds from contract growers than can be sold during the limited product life of the seeds, which could lead to inventory provisions and write-offs.

Currency exchange rate fluctuations or commodity price changes may adversely affect Syngenta's financial results

Syngenta reports its results in US dollars; however a substantial portion of sales and costs are denominated in currencies other than the US dollar. Fluctuations in the values of these currencies, especially in the US dollar against the Swiss franc, British pound, Euro and Brazilian real, can have a material impact on Syngenta's financial results. Also, an increasing amount of Syngenta's sales are in emerging markets, where currency exchange rates can be volatile and where hedging products are expensive or of limited availability. Fluctuations in these emerging market countries' exchange rates against the US dollar may adversely impact Syngenta's results through recognition of currency losses. In addition, several countries in the Eurozone have been experiencing financial difficulties. If a member state of the Eurozone were to decide to abandon the Euro as its lawful currency and introduce a new national currency, Syngenta could incur losses upon the lawful conversion to the new national currency of amounts receivable from customers in the member state that were originally denominated in Euros.

Syngenta is impacted indirectly, through its purchases of raw materials, by fluctuations in oil prices and directly by fluctuations in crop prices, where Syngenta purchases seeds from contract growers. Syngenta generally seeks to pass through in its sales prices the impact of increases in these commodity prices. However, the risk exists that future commodity price increases may not be able to be passed through in sales prices in this manner, which would reduce profit margin and could have a material adverse effect on Syngenta's results of operations, financial position and cash flows.

Syngenta maintains a single supplier for some raw materials, which may affect its ability to obtain sufficient amounts of those materials

While Syngenta generally maintains multiple sources of supply and obtains supplies of raw materials from a number of countries, there are a limited number of instances where Syngenta has entered into single-source supply contracts or where Syngenta routinely makes spot purchases from a single supplier in respect of active ingredients, intermediates or raw materials for certain important products. These instances occur where there is sufficient commercial benefit and security of supply can be assured, or where there is no viable alternative source of supply. Such single supplier arrangements accounted for approximately 19 percent of Syngenta's purchases in 2015 of active ingredients, intermediates and raw materials used in Crop Protection products, as determined by cost. Syngenta's ability to obtain sufficient amounts of those materials may be adversely affected by the unforeseen loss of a supplier or from a supplier's inability to meet its supply obligations. The percentage of single supplier arrangements could increase in the future if consolidation were to occur among multiple supply sources.

Syngenta also has contracts with a number of suppliers for services, including information technology, telecommunications and finance transaction processing. The sudden failure by one of these service providers to meet its obligations could prove disruptive to normal operations for a protracted period and adversely impact Syngenta's financial results. To mitigate this risk, Syngenta limits major contracts only to large global suppliers providing such services as part of their core business and having a significant portfolio of clients receiving similar services. Syngenta continuously monitors these companies both on their performance with Syngenta and their overall health and market performance.

Syngenta conducts business in most countries of the world, including in certain high-risk countries, some of which have been identified by the US government as state sponsors of terrorism

Syngenta conducts business in most countries of the world, some of which are subject to a high level of political or economic instability that could impact Syngenta's ability to continue to operate there. Acts of terror or war may impede Syngenta's ability to operate in particular countries or regions, and may impede the flow of goods and services between countries. Sanctions could be imposed by the US or other nations on countries deemed to be in violation of international protocols, which could impact Syngenta's business operations in the sanctioned countries.

In addition, Syngenta has minor operations in Iran and the Sudan, which currently are identified by the US government as state sponsors of terrorism. Syngenta's operations in these countries are quantitatively immaterial, and it is Syngenta's belief that supporting agriculture in these countries is beneficial to their wider population, for whom food is often in short supply. However, certain investors may choose not to hold investments in companies that have operations of any size in these countries and several US states have enacted, and others may in the future enact, legislation requiring public entities with investments in companies with operations in these countries to disclose this fact or in some cases to divest these investments. Any such divestment is not currently expected to have a material impact on the value of Syngenta shares.

Natural disasters could adversely affect Syngenta's business

Natural disasters could affect Syngenta's or its suppliers' manufacturing and production facilities, which could affect Syngenta's costs or ability to meet supply requirements. Natural disasters could also affect Syngenta's customers, which could affect Syngenta's sales or its ability to collect receivables due from customers. Syngenta's corporate headquarters and other facilities are located near an earthquake fault line in Basel, Switzerland. Additionally, some of Syngenta's other significant facilities are located in areas where earthquakes, hurricanes or flooding are possible. The occurrence of a major earthquake, hurricane or flood at a Syngenta facility could result in loss of life, destruction of facilities and/or business interruption, which could have a material adverse effect on Syngenta's business. In addition, the occurrence of a pandemic in locations where Syngenta has significant operations or sales also could have a material adverse effect on Syngenta's results of operations, financial position and cash flows.

An increase in Syngenta's group tax rate could occur, which would adversely affect its financial results

The effective tax rate on Syngenta's earnings depends largely on the mix of business activities and consequent taxable profit in countries in which Syngenta operates. Syngenta benefits from the fact that a portion of its earnings is taxed at more favorable rates in some jurisdictions outside Switzerland. Future changes in the mix of business activities, or in tax laws or their application with respect to matters such as transfer pricing, intra-group dividends, controlled companies or a restriction in tax relief allowed on the interest on intra-group debt, could increase Syngenta's effective tax rate and adversely affect its financial results. Governments following the release of OECD catalogue of recommended actions under the BEPS initiative (Base Erosion and Profit Shifting) are expected to increasingly require companies to provide greater transparency on the allocation of taxable profits, including the ongoing development of a new multilateral standard on automatic exchange of information. These developments may lead governments to restrict or disallow currently legitimate and accepted tax planning strategies and may result in an increase in Syngenta's effective tax rate. Syngenta has several open tax years in many jurisdictions, where tax calculations and payments may be subject to adjustment. These matters are discussed in Notes 2 and 25 to the consolidated financial statements in Item 18.

Significant breaches of data security or disruptions of information technology systems could adversely affect Syngenta's business

Syngenta's business is increasingly dependent on critical, complex and interdependent information technology systems, including Internet-based systems, to support business processes as well as internal and external communications. The size and complexity of Syngenta's computer systems make them potentially vulnerable to data security breaches, whether by employees or others, which may result in unauthorized persons getting access to sensitive data. Such data security breaches could lead to the loss of trade secrets or other intellectual property. In addition, Syngenta's systems are potentially vulnerable to breakdown, malicious intrusion and computer viruses, which could disrupt production, order processing and shipping, cash receipts and disbursement processes, accounting and reporting processes, or other key business processes. Like most major corporations, Syngenta is the target of cyber-attacks from time to time. To date, Syngenta has not experienced any material financial impact, changes in the competitive environment or business operations that it attributes to these attacks.

Although Syngenta's management does not believe that Syngenta has experienced any material losses to date related to security breaches, including cybersecurity incidents, there can be no assurance that it will not suffer such losses in the future. Syngenta actively manages the risks within its control that could lead to business disruptions and security breaches. As these threats continue to evolve, particularly around cybersecurity, Syngenta may be required to expend significant resources to enhance its control environment, processes, practices and other protective measures. Despite these efforts, such events and a loss of trade secrets or other intellectual property, or systems-related disruption could have a material adverse effect on Syngenta's business, financial position, results of operations or cash flows.

Syngenta's share price may be volatile and subject to sudden and significant drops

The trading price of Syngenta shares and American Depositary Shares ("ADSs") has been, and could in the future continue to be, subject to significant fluctuations in response to variations in Syngenta's financial performance, regulatory and business conditions in its industry, general economic trends and other factors, including the ChemChina tender offer and related matters, some of which are unrelated to the operating performance of Syngenta.

If you hold Syngenta ADSs it may be more difficult for you to exercise your rights

The rights of holders of Syngenta ADSs are governed by the deposit agreement between Syngenta and The Bank of New York Mellon. These rights are different from those of holders of Syngenta shares in several respects, including the receipt of information, the receipt of dividends or other distributions, the exercise of voting rights and attendance at shareholders' meetings. As a result, it may be more difficult for a holder of Syngenta ADSs to exercise those rights.

ITEM 4 — INFORMATION ON THE COMPANY

History and Development of the Company

The Company

Syngenta AG, a Swiss “Aktiengesellschaft”, was formed on November 12, 1999 under the laws of Switzerland. Syngenta’s business operations were created in 2000 by Novartis and AstraZeneca through an agreement to spin off and merge the Novartis agribusiness and the AstraZeneca agrochemicals business to create a dedicated agribusiness company whose shares were then the subject of a global offering. Both the Novartis and AstraZeneca agribusinesses had existed since the 1930’s through a variety of legacy companies.

Syngenta is domiciled in and governed by the laws of Switzerland. It has its registered office and principal business office at Schwarzwaldallee 215, 4058 Basel, Switzerland. The telephone number of Syngenta is +41-61-323-1111.

Syngenta became a publicly listed company in 2000. At December 31, 2015, the company was listed on the SIX Swiss Exchange under the symbol SYNN and the New York Stock Exchange under the symbol SYT.

Investments and Divestments

Information on acquisitions, divestments and other significant transactions completed by Syngenta during each of the years ended December 31, 2015, 2014 and 2013 is included in Item 5 and in Note 3 to the consolidated financial statements in Item 18.

On February 2, 2016, Syngenta entered into a definitive agreement (the “Transaction Agreement”) with China National Chemical Corporation, a company organized under the laws of China, with its registered office in Beijing, People’s Republic of China (“ChemChina”), and China National Agrochemical Corporation, pursuant to which ChemChina agreed to cause a newly-incorporated company that is directly or indirectly controlled by ChemChina (the “Offeror”) to submit a tender offer for all publicly held ordinary shares of Syngenta and American Depositary Shares (“ADSs”) of Syngenta issued by the Bank of New York Mellon as depositary (the “ChemChina Tender Offer”). Under the terms of the Transaction Agreement, which was unanimously approved by Syngenta’s Board of Directors, the Offeror will offer the shareholders of Syngenta \$465 per ordinary share plus allow a special dividend of CHF 5 to be paid by Syngenta conditional upon and prior to closing, in a transaction valued at over \$43 billion. There is committed financing for the ChemChina Tender Offer. The ChemChina Tender Offer is subject to certain conditions, including minimum acceptance of the offer by Syngenta’s shareholders and holders of ADSs holding at least 67 percent of Syngenta’s issued shares (including shares represented by ADSs), receipt of regulatory approvals and other customary closing conditions, and is expected to close by the end of the 2016. For more details on the proposal, please see “Item 5. Operating and Financial Review and Prospects—Trend and Outlook—ChemChina Tender Offer.”

BUSINESS OVERVIEW

Industry Overview

Syngenta is a world leading agribusiness operating in the crop protection, seeds and lawn and garden markets. Crop protection chemicals include herbicides, insecticides, fungicides and seed treatments to control weeds, insects and diseases in crops, and are essential inputs enabling growers around the world to improve agricultural productivity and food quality. In seeds, Syngenta operates in the high value commercial sectors of field crops (including corn, oilseeds, cereals and sugar beet) and vegetables. The lawn and garden business provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

Syngenta’s Business

Syngenta’s business is divided into five reporting segments: the four geographic regions, Europe, Africa and Middle East, North America, Latin America and Asia Pacific, comprising the integrated Crop Protection and Seeds business; and the global Lawn and Garden business. These segments are described in greater detail below.

The following information, which appears in other parts of this Form 20-F, is incorporated herein by reference:

- Item 5 – Operating and Financial Review and Prospects – Results of operations, the tabular information regarding:
 - sales and operating income for the integrated Crop Protection and Seeds business and for each of the four geographic segments therein;
 - sales by product line for the integrated Crop Protection and Seeds business; and
 - sales and operating income for the global Lawn and Garden business.

Sales and operating income for the segments, as presented in Item 5 of this report, are seasonal. Results for the Europe, Africa and Middle East, North America and global Lawn and Garden segments are weighted towards the first half of the calendar year, which largely reflects the northern hemisphere planting and growing cycle. Results for the Latin America segment are weighted towards the second half of the calendar year, which largely reflects the southern hemisphere planting and growing cycle. Results for the Asia Pacific segment are more uniform throughout the year.

References in this document to Syngenta's competitive position, identified by terms such as "world-leading", "leader", "leading", "largest", "broadest", or similar expressions are based where possible on global agrochemical and biotechnology industry information provided by a third party or on information published by major competitors and are supplemented by Syngenta internal estimates.

Integrated Business

Based on the combined strength of its Crop Protection and Seeds businesses, Syngenta regards itself as uniquely positioned to address the increasingly complex challenges facing farmers, through the development of fully integrated offers on a crop basis. The integrated business is structured into 18 territories grouped under the four geographic regions (Europe, Africa and Middle East, North America, Latin America and Asia Pacific). Under this integrated business, Syngenta is developing an expanded crop-based product pipeline and increasing its reach into new markets with new products, solutions and local go-to-market strategies for its eight strategic global crops. These eight global crops comprise cereals (wheat, barley), corn, diverse field crops (sunflower, oilseed rape, sugar beet), rice, soybean, specialty crops (e.g. fruits, trees, nuts, vines, potatoes, cotton, plantation crops), sugar cane and vegetables. Dedicated crop teams work alongside territory and regional management to develop and maximize integrated product and service offers.

Estimated sales by crop for the years ended December 31, 2015, 2014 and 2013 are as follows:

Estimated sales (\$m)	2015	Actual %	Change CER % ¹	2014	Actual %	Change CER % ¹	2013
Cereals	1,686	-13	3	1,943	10	12	1,772
Corn	3,161	-6	4	3,355	-6	-4	3,560
Field crops	1,105	-18	10	1,351	-5	1	1,428
Rice	588	-7	-2	635	-3	2	653
Soybean	2,515	-17	-9	3,017	17	18	2,577
Specialty crops	1,882	-11	1	2,110	5	7	2,004
Sugar cane	271	-1	10	275	-5	-2	290
Vegetables	1,540	-12	-1	1,743	2	5	1,701
Other ²	15	n/a	n/a	12	n/a	n/a	12
Total	12,763	-12	-	14,441	3	6	13,997

Precise sales by crop cannot be determined because many of Syngenta's Crop Protection products can be used on multiple crops.

¹ Change percentage at constant exchange rates ("CER"). For the definition of constant exchange rates, see Appendix A in Item 5.

² Sales of Materials Protection products.

Description of Products

Integrated Business

The development of integrated offers involves combining Syngenta's Crop Protection and Seeds products, and in some instances combining Syngenta's products with third party products and services, to provide growers with innovative ways to improve crop yields and quality. These offers, which are targeted at growers in emerging as well as developed markets, include integrated crop management programs using existing and newly developed crop protection solutions, genetics, innovative genetically modified and native trait packages, and growing protocols.

Crop Protection

Syngenta is active in herbicides, especially for corn, cereals, soybean and rice; fungicides mainly for corn, cereals, fruits, grapes, rice, soybean and vegetables; insecticides for fruits, vegetables and field crops; and seed care, primarily in corn, soybean, cereals, oilseeds and cotton. Herbicides are products that eliminate, prevent the growth of, or reduce weeds that compete with the crop for nutrients, light and water. Herbicides can be subdivided into (i) selective herbicides, which are crop-specific and control weeds without harming the crop and (ii) non-selective herbicides, which reduce or halt the growth of all vegetation with which they come into contact. Fungicides are products that prevent and cure fungal plant diseases that affect crop yield and quality. Insecticides are products that control chewing pests such as caterpillars and sucking pests such as aphids, which reduce crop yields and quality. Seed care products are insecticides, nematicides and fungicides used to protect growth during the early stages of a crop's life. To complement traditional Crop Protection chemistry, Syngenta is also investing in abiotic stress management and biocontrol solutions.

Syngenta has a broad range of Crop Protection products, making it number one or two in all of its target sectors, underpinned by strong worldwide market coverage. Over 75 percent of Syngenta's annual sales of Crop Protection products come from products marketed in all four regions.

Seeds

Syngenta produces and markets seeds and plants that have been developed using advanced genetics and related technologies. Syngenta sells seed products in all geographic territories.

Syngenta's seed portfolio is one of the broadest in the industry, offering over 200 product lines and over 5,000 varieties of Syngenta's own proprietary genetics. Syngenta divides its seed products into field crops, such as corn, soybean, rice, cereals, oilseeds and sugar beet, and vegetables. Syngenta has a significant market share in vegetables, corn, soybean, cereals, sugar beet and sunflower. Seed products are derived from a germplasm pool and trait portfolio and developed further utilizing sophisticated plant-breeding methods. In addition to income from sales of branded seeds, Syngenta generates income from licensing arrangements.

Key Marketed Products and Services

Integrated Business

- **NUCOFFEE**[®] is Syngenta's innovative business model operating in Brazil that brings together growers, cooperatives and roasters. Built around Syngenta's crop protection, quality and barter programs, the NUCOFFEE[®] platform helps Brazilian coffee farmers increase their profitability, with higher yields and better quality for their coffee crop.

Crop Protection

Selective herbicides

Syngenta has a broad range of Selective herbicides that control grasses and broad-leaved weeds and are applicable to most crops, with a special emphasis on corn, soybean and cereals.

- **Atrazine** (AATREX[®]/GESAPRIM[®]) acts mainly against broad-leaved weeds. Although Atrazine was introduced in 1957 and has been off patent for a number of years, it remains an important product for broad-leaved weed control in corn, sorghum and sugarcane. Atrazine is marketed in North America, Latin America, Asia Pacific, Africa and the Middle East.
- **Clodinafop** (TOPIK[™]/HORIZON[™]/CELIO[®]/DISCOVER[®]) is a grass herbicide which provides a broad spectrum of annual grass control in wheat and barley. To further increase crop safety in cereals, the active substance Clodinafop is mixed with the safener Cloquintocet, which selectively enhances the degradation of Clodinafop in cereals but not in grass weeds. Clodinafop is marketed in all regions.
- **Fluazifop-P-Butyl** (FUSILADE[®]) is one of the leading products for post-emergence control of grass weeds. It is registered for use in over 60 crops with major outlets in cotton and soybeans in the United States and Brazil; and sugar beet and oilseed rape in Europe. The selective action of FUSILADE[®] allows growers to target applications when grass weeds appear, allowing cost-effective weed control. Fluazifop-P-Butyl is marketed in all regions.
- **Fomesafen** (FLEX[®]) provides pre- and post-emergence control and quick eradication of a wide range of broadleaf weeds to protect yields in soybeans, dry beans and other legume crops and cotton. Fomesafen is marketed in all regions.
- **Mesotrione** (CALLISTO[®] family) is a pre- and post-emergent herbicide with a very broad spectrum against key broad-leaved weeds in corn and sugar cane. Mesotrione is marketed in all regions.
- **Pinoxaden** (AXIAL[®]) is an innovative post-emergent selective grassweed herbicide, for use in both wheat and barley. It offers the grower efficacy, selectivity and flexibility. Pinoxaden is marketed in all regions.

- **S-metolachlor** (DUAL GOLD®/DUAL MAGNUM®) is a lower dose rate replacement for metolachlor for grass weeds control. Its use has not only reduced the amount of product sprayed on fields, thus responding to the pesticide reduction goals established by many countries, but has also decreased the energy required to produce, transport and store the product, as well as decreasing total packaging material. S-metolachlor is well tolerated and can be safely used on more than 70 different crops. It manages difficult to control glyphosate-resistant weeds and is a key component in Syngenta's Early Season Weed Management portfolio. S-metolachlor is marketed in all regions.

Non-selective herbicides

Syngenta has a series of Non-selective herbicides, which reduce or halt the growth of all vegetation with which they come in contact.

- **Diquat** (REGLONE®), a non-selective contact herbicide, is mainly used as a desiccant to allow easier harvesting and reduce drying costs. Diquat is marketed in all regions.
- **Glyphosate** (TOUCHDOWN® /TRAXION® /ZAPP®), a non-selective herbicide with systemic activity, is Syngenta's offer in the market for glyphosate-based products. Glyphosate is registered in over 90 countries, including for use on herbicide tolerant corn and soybeans in the United States and Brazil. Glyphosate is marketed in all regions.
- **Paraquat** (GRAMOXONE®), first introduced in 1962, is one of the world's largest selling non-selective contact herbicides and a vital tool to manage increasing weed resistance challenges worldwide. It has been a key product in the development of minimum tillage cropping systems, the adoption of which continues to increase because of benefits such as the reduction of soil erosion. Paraquat is marketed in North America, Latin America, Asia Pacific, Africa and the Middle East.

Fungicides

Syngenta has a broad range of Fungicides that prevent and cure fungal plant diseases that affect crop yield and quality.

- **Azoxystrobin** (AMISTAR® Technology), a strobilurin fungicide, is the world's best-selling proprietary fungicide and Syngenta's largest selling product. It is registered for use in approximately 100 countries and for approximately 120 crops. In Brazil, it is used to control Asian rust in soybeans in a mixture branded as PRIORI®Xtra. Mixtures of AMISTAR® Technology with triazoles (cyproconazole, difenoconazole or propiconazole) or chlorothalonil have been developed to combat diseases in cereal crops, primarily in Europe. Mixtures are also used in corn (QUILT®), rice, vegetables and specialty crops (AMISTAR® Top, AMISTAR® Xtra). AMISTAR® Technology is marketed in all regions.
- **Chlorothalonil** (BRAVO®) is a world-leading fungicide. With its multi-site mode of action, it is a good partner for most fungicides such as AMISTAR® Technology or isopyrazam, mefenoxam, and mandipropamid and is increasingly being integrated into disease control programs using multiple products. Chlorothalonil is used in all major crops and in lawn and garden, and is marketed in all regions.
- **Cyproconazole** (ALTO®) is a systemic fungicide with broad-spectrum activity, especially against rust and leaf spot in cereals, soybean, sugar beet and coffee. Syngenta mainly sells cyproconazole in mixtures with other fungicides principally in Latin America and Europe, Africa and Middle East. Cyproconazole is marketed in all regions.

- **Cyprodinil** (UNIX[®]/STEREO^{®1}/SWITCH[®]/CHORUS[®]) is a powerful fungicide for use on cereals. It is used to control eyespot, powdery mildew and leaf spot diseases. Because it has a specific mode of action, it is a particularly effective solution where resistance to other fungicides has developed. CHORUS[®] and SWITCH[®] are cyprodinil-based formulations which are used on pome fruit such as apples and pears or on grapes and vegetables. Cyprodinil is marketed in all regions.
- **Difenoconazole** (SCORE[®], ARMURE[®], TASPA[®]) is a systemic triazole fungicide with broad-spectrum activity against plant diseases, particularly leaf spots of pome fruit, vegetables, soybeans, rice and plantation crops. Long-lasting protective and strong curative activity make it well suited for threshold based plant disease management whereby the plant is treated only when the development of the disease has passed a certain point. Target crop pathogens include *Cercospora*, *Alternaria*, *Septoria* and other leaf spots, powdery mildews and scabs as well as seed-borne diseases. Difenoconazole is marketed in all regions.
- **Fluazinam**² (SHIRLAN[®]) is a fungicide for control of potato blight. Fluazinam is marketed in Europe, Africa and Middle East, North America and Latin America.
- **Mandipropamid** (REVUS[®]) is currently registered in almost 100 countries and is used on fruits and vegetables to combat late blight and downy mildew. Mandipropamid is marketed in all regions.
- **MEFENOXAM**^{TM3} (RIDOMIL GOLD[®]/FOLIO GOLD[®]/SUBDUE[®]) is used for the control of air-borne, seed- and soil-borne diseases caused by fungi such as pythium, damping-off, late blight, pink rot and downy mildews. It is used on a wide variety of crops, including field, vegetable, oil and fiber crops. MEFENOXAMTM is marketed in all regions.
- **Propiconazole**⁴ (TILT[®]/BANNER[®]) is a foliar fungicide for broad spectrum disease control in cereals, bananas, rice, corn, peanuts, sugar beet, turf and other food and non-food crops. Propiconazole provides a strong curative and protective activity against a wide range of plant pathogens including powdery mildews, rusts and other leaf spot pathogens. Propiconazole is marketed in all regions.
- **Trinexapac-ethyl** (MODDUS[®]) is a plant growth regulator. In cereals it reduces growth so that treated plants stay shorter and have stronger stems, enhancing their ability to withstand storms and remain upright until harvest. In sugar cane it is a yield enhancer and harvest management tool. Trinexapac-ethyl is marketed in all regions.

Insecticides

Syngenta has a broad range of Insecticides that control chewing pests such as caterpillars and sucking pests such as aphids, which reduce crop yields and quality. These products are applied either to the soil or sprayed onto the foliage.

- **Abamectin** (VERTIMEC[®] or AGRIMEC[®]/AGRI-MEK[®]) is produced by fermentation. This potent insecticide and acaricide is used at very low dose rates against mites, leafminers, nematodes and some other insects in fruits, vegetables, cotton and ornamentals. Abamectin rapidly penetrates the plants and is a useful product for integrated pest management. Abamectin is marketed in all regions.

¹ Pursuant to commitments given to the European Commission, Syngenta granted an exclusive right to Makhteshim Agan Industries Ltd. (now Adama Ltd.) to use and sell STEREO[®] formulation for use on cereals for the duration of its registration in Denmark, Finland and Sweden.

² Fluazinam is distributed, but not manufactured, by Syngenta.

³ Mefenoxam is a generic expression in the United States whereas in other countries MEFENOXAMTM is a trademark of Syngenta Participations AG to denominate the active ingredient Metalaxyl-M (ISO name).

⁴ Pursuant to commitments given to the European Commission, Syngenta granted an exclusive right to Makhteshim Agan Industries Ltd. (now Adama Ltd.) to use and sell its TILT[®] 250EC and TILT[®] 6.25GL formulations for use on cereals in Denmark, Finland and Sweden for the duration of their registrations.

- **Chlorantraniliprole mixtures** (DURIVO®/AMPLIGO®/VIRTAKO®/VOLIAM FLEXI®/VOLIAM TARGO®). Chlorantraniliprole, licensed from E.I. DuPont de Nemours and Co (“DuPont”) for sale in mixtures with Syngenta active ingredients, is a chemical of the diamide class characterized by a unique mode of action and outstanding activity on all major lepidoptera pests in soybean, rice, vegetables, corn, fruits and cotton. Chlorantraniliprole mixtures are marketed in all regions.
- **Emamectin Benzoate** (PROCLAIM® or AFFIRM®) provides control of caterpillars on vegetables, cotton and fruits, combining a unique mode of action with extremely low use rates and is compatible with integrated pest management. It has been launched in major markets such as Japan, Korea, the United States, Mexico, Australia and India and is under registration in a number of other countries. Emamectin Benzoate is marketed in all regions.
- **Lambda-cyhalothrin** (KARATE®/ICON®) is one of the world’s most potent pyrethroids and is used on a wide range of crops to control chewing and sucking insects. Lambda-cyhalothrin is marketed in all regions.
- **Lufenuron** (MATCH®) is an insect growth regulator that controls caterpillars in corn, potatoes, cotton, vegetables and fruits. It is a leading insecticide in terms of sales in its chemical class. Lufenuron is marketed in Europe, Africa and Middle East, Latin America and Asia Pacific.
- **Thiamethoxam** (ACTARA®/ENGEO®) is highly active at low use rates against a broad spectrum of soil and sucking insects. It is highly systemic and well suited for application as a foliar spray, drench or drip irrigation. It is fast acting, works equally well under dry and wet conditions and has a favorable safety and environmental profile. It has been developed for a broad range of crops, including vegetables, potatoes, cotton, soybeans, rice, pome fruits and stone fruits (such as peaches or plums). Thiamethoxam is marketed in all regions⁵.
- **Tefluthrin** (FORCE®) is a premium corn granular and liquid insecticide that provides broad-spectrum soil insect control and residue activity. Tefluthrin is marketed in all regions.

Seedcare

The use of Seedcare products is an effective, efficient, and targeted method to protect seedlings and young plants against diseases, insects and nematodes during the period when they are most vulnerable. Syngenta’s broad range of fungicides, insecticides and nematicides allows it to provide a modern portfolio of safe and highly effective products. As seeds increase in value, seed protection becomes more important.

- **Abamectin** (AVICTA®) is a seed treatment for the control of nematodes in cotton, corn and soybeans. Abamectin is currently marketed in North America, Latin America and South Africa.
- **Difenoconazole** (DIVIDEND®) is active against a broad range of diseases including bunts, smut and damping-off on cereals and oilseed rape/canola. This product is highly systemic and provides a long lasting, high-level effect. It is safe for seeds and seedlings and provides for a faster germination than other products in the market. Difenoconazole is marketed in all regions.
- **Fludioxonil** (MAXIM® or CELEST®) is a contact fungicide with residual activity. Derived from a natural compound, fludioxonil combines excellent crop tolerance with low use rates. Its spectrum of targets includes seed and soil-borne diseases like damping-off, bunt, smut, fusarium, snow mold and leaf stripe on cereals. Used alone or in mixtures with other active substances, it is also effective on corn, soybean, rice, cotton, potatoes, vegetables and peas. Fludioxonil is marketed in all regions.

⁵ The European Commission suspended effective December 1, 2013 the use of neonicotinoid insecticides on bee attractive crops before and during flowering due to the alleged impact of these products on bee populations. The suspension impacts sales of Syngenta’s thiamethoxam products in European Union markets, primarily the seed treatment CRUISER® in corn, sunflower and oilseed rape crops. Directly impacted annual sales of Syngenta’s thiamethoxam products in European Union markets at the time use of the product was suspended were less than \$100 million. On August 27, 2013, Syngenta submitted a legal challenge to the European Commission’s decision to suspend the use of thiamethoxam on bee attractive crops. Thiamethoxam continues to be used in European Union markets as CRUISER® in sugar beet, a non-bee attractive crop, and in potatoes and vegetable crops in glass houses, and as ACTARA®/ENGEO® on all crops after flowering.

- **MEFENOXAM**^{TM3} (APRON[®] XL) is used for the control of seed and soil-borne diseases caused by fungi such as pythium, phytophthora and downy mildews. It is used worldwide on a wide variety of crops, including field crops, vegetables, oil and fiber crops. MEFENOXAMTM is also used as a mixing partner for seed protection at low use rates. MEFENOXAMTM is marketed in all regions.
- **Thiamethoxam** (CRUISER[®]) is an insecticide with systemic activity in a wide range of crops including cereals, cotton, soybeans, canola, sugar beet, corn, sunflower and rice. Its properties are such that it provides a consistent performance under a wide range of growing conditions. Thiamethoxam acts against a wide range of early season sucking and chewing, leaf feeding and soil-dwelling insects such as aphids, thrips, jassids, wireworms, flea beetles and leafminers. Thiamethoxam is marketed in all regions⁵.

Seeds

Field crops

- **Cereals** (NK[®], AGRIPRO[®] COKERTM, RESOURCE SEEDS INC., C.C. BENOISTTM) wheat and barley varieties combine high yield, superior disease resistance and agronomic characteristics coupled with excellent grain quality for the milling, malting and animal feed industries. Cereals are sold mainly in Europe and North America.
- **Corn** (GOLDEN HARVESTTM, NK[®], SPS[®], INNOTECHTM, CATALYST[®] and PHOENIX[®]) hybrids are sold by Syngenta via established distribution channels covering a full range of countries and maturities. In addition, hybrids and inbred lines are licensed to other seed companies in the US via Greenleaf Genetics LLC. Syngenta hybrids are characterized by their high yield potential, stability of performance, uniformity and vigor. In approved markets, many of Syngenta's elite hybrids are offered as stacked trait versions that include AGRISURE VIPTERA[®], and AGRISURE DURACADE[®], which provide built-in insect protection against corn borers and corn rootworms and tolerance to glyphosate herbicide. Syngenta offers four specific trait stacks that carry the title E-Z REFUGE[®] and are integrated refuge products. The products are more convenient for growers than planting a separate refuge and also improve the durability of the insect control traits by facilitating refuge compliance. Syngenta also offers seeds with AGRISURE ARTESIAN[®] technology, which improves the corn plant's water use efficiency. Competitive hybrids developed through marker assisted breeding are sold for silage and grain markets. Different hybrids of corn seeds are marketed in all regions.
- **Oilseeds** (SYNGENTA[®], NK[®], SPS[®]) include sunflower and oilseed rape. Syngenta sunflower seed hybrids are bred for high yield as well as heat stress tolerance, disease resistance, broomrape tolerance, herbicide tolerance and oil quality. Syngenta's oilseed varieties combine high yield genetic superiority and herbicide tolerance, which give growers flexibility in their weed control. The company's oilseed rape varieties and hybrids offer good oil production and plant health. Sunflower seeds are sold primarily in Russia, Ukraine, Southeast Europe and Argentina while the major markets for oilseed rape are Europe and Canada.
- **Rice** (FRONTLINE[®]) In 2012, Syngenta acquired Devgen, which significantly broadened its rice portfolio with the addition of the FRONTLINE[®] brand. Under Rice Seeds global brand FRONTLINE[®], new hybrids are introduced with improved yield, seed productivity, grain quality, and tolerance to biotic and abiotic stress factors. Rice is marketed in Asia Pacific.
- **Soybean** (SYNGENTA[®], NK[®], SPS[®]) varieties combine high yield genetic superiority, insect control⁶ and herbicide tolerance⁶, which give growers flexibility in their insect and weed control. The major markets for soybean are in North America and Latin America. Syngenta also licenses varieties of soybean to other seed companies in the USA via Greenleaf Genetics LLC.

⁶ Genuity[®] Roundup Ready[®] and Genuity[®] Roundup Ready 2 Yield[®] herbicide tolerance traits are licensed from Monsanto Technology LLC. Genuity[®] Roundup Ready[®] and Roundup Ready 2 Yield[®] are registered trademarks of Monsanto Technology LLC. Intacta RR2 PROTM is licensed from Monsanto Technology LLC.

- **Sugar beet** (SYNGENTA[®], HILLESÖG[®], MARIBO[®]) seeds are bred to develop high yielding varieties with good stress and disease tolerance, high sugar content, low soil tare and improved juice purity. The major markets for sugar beet seeds are in Europe and North America.
- **Sugar beet** varieties with the Genuity[®] Roundup Ready^{®6} herbicide tolerance trait feature high sugar content and multiple disease resistances across a number of geographies. These sugar beet seeds are marketed in the USA and Canada.

Vegetables

- Vegetables brands include ROGERS[®], S&G[®], ZERAIM GEDERA[®] and DAEHNFELDT[®]. Syngenta offers a full range of vegetable seeds, including beans, broccoli, cabbage, carrots, cauliflower, cucumbers, lettuce, melons, onions, okra, peas, peppers, spinach, squash, sweet corn, tomatoes and watermelons. Syngenta breeds varieties with high-yield potential that can resist and tolerate pests and diseases. Syngenta develops genetics that address the needs of consumers as well as processors and commercial fresh market growers. In 2013 Syngenta acquired the breeding programs for cucumber, tomato and pepper for greenhouse production from MayAgro Seeds, broadening its offer in Turkey and the Middle East. Different varieties of vegetable seeds are marketed in all regions.

Recently Launched Products and Services (last 3 years)

Integrated Business

- **GROMORE™** is a holistic crop protection and agronomy protocol with a targeted go-to-market approach that provides guidance to smallholder growers for crop protection, seed, nutrients and water optimization which helps them overcome challenges resulting from water scarcity, labor shortages and productivity. Growers can realize yield gains by being better able to choose the right input at the right dose and at the right time for each of the four key growth phases of the crop.
- **PLENE[®]** is a revolutionary solution for sugar cane in Brazil, combining chemistry, plant genetics and mechanical technology to provide an integrated cane planting solution. **PLENE[®] EVOLVE™** is a young plant that can be mechanically transplanted and accelerates variety renewal through elite genetics. It can be multiplied directly by the customer resulting in increased genetic purity and high productivity. **PLENE[®] PB** is a pre-germinated seed cane with a simple planting process and offering a superior multiplication rate together with yield, vigor and quality. In 2015, Syngenta significantly increased production capacity for **PLENE PB**.
- **HYVIDO[®]** is a hybrid barley that offers increased yield, consistency of yield and improved resistance to abiotic stresses. In addition, Syngenta currently offers growers who purchase **HYVIDO[®]** an optional cash-back yield guarantee. It guarantees that farmers who subscribe to the offer and use the agronomy protocol (which includes seeds and Syngenta Crop Protection products to maximize yield) will be reimbursed for part of the cost of the program if the yield from reference fields of **HYVIDO[®]** is not higher by a specified amount than the yield from conventional fields.
- **INTEGRARE™** is Syngenta's High Yield Soybean solution tailored for Brazilian growers to unlock the full yield potential of their crop and increase the confidence on their return on investment. It is a complete offer combining a best in class portfolio (seeds, Seedcare, crop protection chemicals) and customized protocols together with agronomic (e.g. plant nutrition advice) and financial services (e.g. risk management).
- **Fruit Quality Contract** enhances growers' market access while reducing complexity and risk through a tailored Crop Protection program with cashback assurance. It enables growers to comply with export and food chain requirements.
- **New Customer** in Cereals offers food companies and growers the ability to increase local sourcing of high quality grains in emerging markets. Current relationships include AB InBev in beer and Baronia in pasta.

- **'Water+' Intelligent Irrigation Platform** is designed to deliver improved revenue potential by conveniently integrating crop inputs, agronomic expertise and technology.
- **Ethanol Grain Quality Solution** is a production system that improves corn quality delivered to ethanol plants, resulting in higher ethanol output.

Crop Protection

Fungicides

- **Isopyrazam** (BONTIMA[®], SEGURIS[®], REFLECT[®]) is a new broad-spectrum fungicide for cereals, banana, pome fruit, oilseed rape and vegetables which complements Syngenta's existing product range and provides additional resistance management opportunities. Isopyrazam is marketed in Europe, Africa and Middle East, Latin America and Asia Pacific.
- **SOLATENOL**[™] (ELATUS[™], APROVIA[™]) belongs to the carboxamide chemistry with SDHI mode of action and is combined with AMISTAR[®] Technology to produce ELATUS[™], a foliar fungicide for use on soybean Asian Rust disease, which is the largest disease problem faced by farmers in Latin America. ELATUS[™] was introduced in Paraguay and Bolivia in 2013 and Brazil in 2014. It was also launched in Argentina in 2015 on peanuts. SOLATENOL[™] received registration from the US Environmental Protection Agency in 2015. First significant sales in the USA are expected in the 2016 season. SOLATENOL[™] received registration for use in the European Union in January 2016. First sales in France are expected in the 2016 growing season.
- In addition, Syngenta has recently introduced a range of **biologicals** into its portfolio in different countries including the brands QUANTIS, ISABION[®], TAEGR0^{®7}, SAKALIA[®], TIMOREX^{®8} GOLD and REMEDIER^{®9}.

Selective herbicides

- **Bicyclopyrone** (ACURON[®]) is the leading residual corn herbicide which provides broad spectrum broadleaf and annual grass weeds control. Bicyclopyrone was developed to complement mesotrione. When combined with atrazine and S-metolachlor in ACURON[®], which was launched in the US corn market in 2015, it delivers multi-targeted control of the most problematic broadleaf and grass weeds with built-in resistance management technology with 4 active ingredients and 3 modes of action.

Seedcare

- **Pasteuria spp** (CLARIVA[®]) is an endospore-forming bacterium that is a natural control for nematodes offering immediate infection, which stops them from feeding and reproducing and ultimately kills them. CLARIVA[®] is currently registered for sale and use in the USA for soybeans.
- **Cyantraniliprole** (FORTENZA[®]) Syngenta acquired from DuPont in 2008 the rights to access cyantraniliprole, a second generation diamide, for use in different agricultural fields. This new seed treatment insecticide has a different mode of action acting as both a chemical and insect resistance management tool. It delivers best-in-class early season insect protection both above and below ground and will be available for a wide range of crops including corn, soybeans, oilseed rape/canola, sunflower and rice. FORTENZA[®] was granted registration in several countries including Canada and Argentina in 2013, China in 2014 and Mexico in 2015. Future seed treatment registrations are planned for Brazil and other Latin American countries, US, other Asian countries, Europe and Africa. FORTENZA[®] has been commercially launched in Argentina, China and Canada.
- **Sedaxane** (VIBRANCE[®]) is a proprietary fungicide based on the SDHI mode of action combining excellent control against a broad range of seed- and soil-borne diseases with ideal mobility in the soil. This gives long-lasting protection for the entire root system, resulting in higher crop productivity in a broad range of crops including cereals, soybean, oilseed rape/canola, corn, rice, sugar beet, sunflower, cotton and potatoes. Sedaxane received broad registration in 2014 and is marketed in all regions.

⁷ TAEGR0[®] is licensed from, and is a registered trademark of Novozymes A/S.

⁸ TIMOREX[®] GOLD is licensed from, and is a registered trademark of BIOMORE ISRAEL LTD.

⁹ REMEDIER[®] is licensed from, and is a registered trademark of ISAGRO S.p.A.

Seeds

Field crops

- AGRISURE VIPTERA[®] stacked trait hybrids continue to expand in Brazil, Argentina and Colombia. Through Syngenta's enhanced corn breeding and trait conversion capabilities, 14 new genetic chassis and 38 new **corn** hybrids were launched in the branded North America portfolio in 2015.
- In **corn**, 15 of the 38 new hybrids in North America will be sold in the EZ-Refuge[®] format, combining grower convenience and compliance with insect resistance management guidelines.
- In **corn**, growers planted Syngenta genetically modified hybrids in Vietnam for the first time in 2015, consisting of GM technology that includes herbicide and insect resistance.
- In **corn**, ARTESIAN[™] technology continues to expand across North America and Europe, Africa and Middle East. Hybrids with ARTESIAN[™] technology increased to 28 percent of sales in North America in 2015 from 21 percent in 2014 and doubled in EAME over the same period.
- ENOGEN[®] is a **corn** seed technology incorporating a corn amylase trait that is the first genetically modified output trait in corn for the US ethanol industry. By enabling expression of an optimized alpha-amylase enzyme directly in corn, dry grind ethanol production can be improved in a way that can be easily integrated into existing infrastructure. Syngenta signed an agreement in 2014 with Cellulosic Ethanol Technologies, LLC (CET) (wholly owned subsidiary of Quad County Corn Processors) to make ethanol from corn kernel fiber. The combination of CET's Cellerate[™] process technology (formerly known as Adding Cellulosic Ethanol or ACE) with ENOGEN[®] technology provides synergistic benefits enabling a substantial increase in performance, sustainability and profitability of ethanol plants.
- Syngenta continues to deliver a strong portfolio of **soybean**, with the launch of more than 50 new varieties in North America and South America having improved diverse genetics bringing new levels of resistance to key diseases.

Additionally, in South America, Syngenta introduced soybean varieties with herbicide tolerance and insect control¹⁰.

- In **wheat**, a number of new products have been launched across the spring and winter wheat ranges with high yield, good disease tolerance and high bread making qualities. These new wheat seeds are marketed mainly in Europe and North America.
- In **oilseeds**, Syngenta entered the canola seeds business in Canada in the 2013/2014 growing season and currently is marketing four high yielding hybrids with herbicide tolerance provided by the Genuity[®] Roundup Ready^{®6} trait. This new hybrid barterseed portfolio is being commercialized as part of an integrated cross-crop solution across the whole farm targeting canola, cereals and pulses.

¹⁰ Intacta RR2 PRO[™] is licensed from Monsanto Technology LLC.

Vegetables

In Vegetables, Syngenta continues to launch new and attractive consumer products in the United States, Europe and other parts of the world. Some examples of recently launched products include:

- In **melon**, HODA, a yellow canary variety for cultivation in Africa and the Middle East.
- In **pepper**, FELICITAS and CONGA, new blocky varieties for protected production in the Americas; MERKAVA, a new blocky variety for protected production in Europe.
- In **cauliflower**, CAYLEN, a variety for production in Europe which brings a very good curd quality; CFL1522, a variety with strong heat and humidity tolerance as well as a good curd presentation for the tropical regions.
- In **squash**, new products PROMETHEUS in Europe and SPINELESS PERFECTION in the USA, which offer growers excellent high yield with a broad-spectrum disease resistance.
- In **sweet corn**, GSS2259P/SHINEROCK multi disease resistant processing sweet corn variety with high yield potential and a native herbicide tolerance, launched globally, and GSS1453 variety with enhanced disease resistance packaged with high yield potential and deep kernels for high recovery, launched in North America.
- In **tomato**, NEBULA, a new cherry variety for protected greenhouses in worldwide sophisticated markets, which consistently delivers an outstanding flavor and sets new taste standards; BAMBELLO and SEYCHELLE, two new baby plum varieties for protected greenhouses, which bring a unique combination of taste, color, convenience and agronomic performance; TA11057, a variety which offers improved yield, strong virus resistance, heat set and firmness in South Asia.
- In **watermelon**, successful large fruit size seedless varieties such as FASCINATION in the USA and in northern Latin America, and EXCLAMATION in the USA. In addition, EL GHALI, a large fruit size seeded variety was launched in North Africa.

Products and Services in Late Stage Development

Integrated Business

Syngenta's integrated business offers in late stage development include:

- **PLENE[®]** - In 2014, Syngenta announced plans to broaden and scale up its PLENE[®] platform of integrated sugar cane solutions. The PLENE[®] platform will have in the future three products: PLENE[®] Evolve and PLENE[®] PB for nurseries and gap filling, and PLENE[®] Emerald for commercial planting. Through an exclusive licensing agreement with New Energy Farms, Syngenta will access an innovative planting system for sugar cane in Brazil: CEEDS[™] (Crop Expansion Encapsulation and Drilling System). The CEEDS[™] technology under development will deliver PLENE[®] Emerald. Activities in 2016 and 2017 will focus on field trials and research and development ("R&D") development with pre-launch expected by the end of 2017 and commercial sales beginning in 2018.
- **MAXVEG[™]** is an integrated crop protection and agronomy offer for smallholder growers particularly in Asia matching crop protection and nutrients to crop growth stages of specific varieties in order to increase yield.
- **Vegetables Sustainability & Productivity** offers for sophisticated growers of greenhouse vegetables in Europe combining seed varieties, crop protection products and biologicals in order to increase crop yield, reduce input resources and ensure produce meeting stringent retailer demands.
- **Cotton Fast Start Performance** provides cotton growers with integrated solutions to address biotic and abiotic concerns, focusing on the initial stages of the growth cycle to enable healthy cotton establishment, increased yields and improved quality.

Crop Protection

Syngenta's pipeline of products under development includes the following Crop Protection products in late stage development:

Fungicides

- **Oxathiapiprolin**¹¹ (ORONDIS™) is a piperidinyl thiazole isoxazoline class of fungicides. ORONDIS™ is a step change fungicide for oomycete control in vegetables and specialty crops providing effective long lasting field performance, protection of new growth in plants and consistent disease control. ORONDIS™ premixes with various active ingredients will be sold worldwide within one global brand family that contains suffixes for differentiation of the mixtures. ORONDIS™ received registration from the US Environmental Protection Agency in 2015 and is expected to be launched in 2016.
- **ADEPIDYN**™ (pydiflumetofen) is a new broad spectrum fungicide belonging to carboxamide chemical class, having an SDHI mode of action. It delivers a step change in efficacy against leaf spots and excellent control of powdery mildew across multiple crops. In addition ADEPIDYN™ is highly active on difficult to control diseases such as *Botrytis*, *Sclerotinia*, *Corynespora* and Fusarium Head Blight, which cause severe damage on key crops. Products containing ADEPIDYN™ are being developed for canola, cereals, corn, soybean, specialty crops, vegetables and Lawn and Garden across the globe, with the first product launch expected in 2017.

Insecticides

- **Cyantraniliprole mixtures** (MINECTO™) Syngenta acquired from DuPont the exclusive right to use cyantraniliprole in mixtures with Syngenta insect control products. Cyantraniliprole is a new broad-spectrum insecticide that also controls sucking pests and is complementary to the chlorantraniliprole insect control product used for Lepidoptera pest control that Syngenta sells in mixtures with its own leading insect control products.

Seeds

Syngenta seeks to produce improved hybrid and varietal seeds to meet the agronomical conditions and demands of its customers and to work towards further improvement of traits advantageous to the grower, i.e., input traits, such as resistance to diseases and insects, and greater yield. In vegetable seeds, Syngenta develops new products to provide consumers with consistent high quality, improved appearance, taste and texture. Powerful analytical science has been expanding the knowledge of taste, flavor and post-harvest shelf life. Combined with advanced breeding technology, this is accelerating the introduction of novel varieties.

Below are examples of products in development:

Field crops

- In **barley**, next generation spring malting barley with improved enzyme characteristics and new winter barley hybrids combining high yield with improved production characteristics. Syngenta's first hybrid malting barley variety has started the registration process.
- Syngenta continues to work towards developing **corn** seeds across a variety of maturities with high yield, stress tolerance and improved agronomic characteristics, including developing the next generation corn rootworm control trait with a unique mode of action and high efficiency, and stacking multiple modes of action for the same target insects (trait pyramiding) to improve efficacy, combat insect resistance and provide refuge reduction in corn while increasing long-term product sustainability.

¹¹ Oxathiapiprolin is licensed from DuPont.

- High yield SAFECROSS™ hybrids with improved disease resistance and stress tolerance in winter **oilseed rape**.
- In **rice**, Syngenta is developing an enhanced hybrid portfolio by combining its legacy breeding programs with those acquired in the Devgen acquisition.
- A wide range of **soybean** varieties in late stage development deliver expanded spectrum control of soybean cyst nematodes through utilization of alternate native trait sources of resistance and combines this control with tolerance to sudden death syndrome, iron deficiency chlorosis and phytophthora root rot. In South America the development of a full proprietary portfolio with herbicide tolerance and insect control¹⁰ varieties covering major maturity groups and market segments is well advanced.
- **Sugar beet** with second generation nematode tolerance for the European market and with broad-spectrum disease and virus resistance in combination with Genuity® Roundup Ready®⁶ herbicide tolerance trait for the North American market.
- **Sunflower** with high stable yields, integrating broomrape, herbicide and disease resistance.
- Healthy oil varieties of **high oleic sunflower** comprising higher heat stability of plant oils for frying.
- In **wheat**, Fusarium tolerance, high yield, improved and novel quality, new disease resistance and drought tolerance. In addition, Syngenta is developing a hybrid wheat technology and portfolio, capitalizing on best-in-class breeding expertise and conventional germplasm, some leading commercial positions in conventional wheat in North America and Europe, Africa and Middle East, and prior experience in hybrid barley.

Vegetables

- Focus on increased agronomic quality, fruit quality and shelf life improvements and better plant performance in combination with virus, fungal and insect resistances to provide increased grower performance reliability.
- Advancing abiotic stress tolerant traits for rootstocks for the high value tomato and pepper markets.
- Developing new fruit sizes in melons and watermelons tailored to shrinking family sizes in North America and Europe.
- Bringing forward new consumer and value chain traits for textures that improve the quality of fresh cut fruit.
- Vegetable research and development to advance convenience traits for consumers.

Marketing and Distribution

Syngenta has marketing organizations in all its major markets with dedicated sales forces that provide customer and technical service, product promotion and market support. Products are sold to the end user through independent distributors and dealers, most of which also handle other manufacturers' products. Syngenta's products normally are sold through a two-step or three-step distribution chain. In the two-step chain Syngenta sells its products to cooperatives or independent distributors, which then sell to the grower as the end user. In the three-step system, Syngenta sells to distributors or cooperative unions which act as wholesalers and sell the product to independent dealers or primary cooperatives before on-selling to growers. Syngenta also sells directly to large growers in some countries. Syngenta's marketing network enables it to launch its products quickly and effectively and to exploit its range of existing products. Syngenta focuses on key crop opportunities in each territory. In those countries where Syngenta does not have its own marketing organization, it markets and distributes through other distribution channels. Generally, the marketing and distribution system in a country does not vary by product.

Syngenta's marketing activities are directed towards distributors, agricultural consultants and growers. They consist of a broad range of advertising and promotional tools, such as meetings with growers and distributors, field demonstrations, advertisements in specialized publications, direct marketing activities, or information via the Internet. Syngenta is also in constant contact with the food and feed chain to evaluate current and future needs and expectations.

A key element of Syngenta's marketing is grower support and education. This is particularly important with respect to small growers in developing countries. For many years, Syngenta has held numerous courses around the world for growers as a result of which millions of farmers have been trained in the safe and sustainable use of crop protection products. As part of the Good Growth Plan initiated in 2014, Syngenta targets reaching 20 million smallholder farmers and helping them increase their productivity by 50 percent, while preserving the long-term potential of their land. This is being done with the help of organizations such as USAID to enable access to technology and capacity building for smallholder farming in developing countries. Syngenta also trains agricultural extension workers and distributors so that they can further disseminate good practice and reach an even wider audience.

Products must obtain governmental regulatory approval prior to marketing. The regulatory framework for agribusiness products is designed to ensure the protection of the consumer, the grower and the environment.

Syngenta's products are marketed throughout the world through brands, many of which are well known by growers and some of which have been established for many years. Brand names for Syngenta's key products are listed above in "Integrated Business – Key Marketed Products". Syngenta's sales force markets the majority of Syngenta's brands, either to customers directly, in partnership with distributors, or through a network of dealers.

Syngenta has developed and utilizes a number of innovative ways to attract and retain customers in different parts of the world. In an effort to manage some foreign exchange and commodity price volatility in some countries, including Brazil and Argentina, Syngenta sells via barter. In Brazil and Argentina, a recognized agricultural barter trading method allows growers to pre-arrange sale of their soybean, cotton and cereals crops to commodity traders. Under such pre-arrangements, traders pay Syngenta for its crop protection products on growers' behalf when growers deliver crops to the traders. Syngenta generally does not take ownership or delivery of the crops and retains only insignificant commodity price risk in barter transactions. Syngenta also directly barter with Brazilian coffee farmers by accepting their crop as payment for its crop protection products. Syngenta has developed a coffee trading network which sells the coffee to roasters and cooperatives internationally. These barter programs also help Syngenta and its customers mitigate the cash flow and financing risks inherent in the Brazilian agricultural market. Approximately 20 percent of Syngenta's sales in Brazil and 50 percent of sales in Argentina are transacted under one of these barter programs. Syngenta has introduced similar barter programs in Ukraine to secure collection of receivables from customers or to encourage growers to prepay for crop protection or seed products. Approximately 15 percent of Syngenta's Ukraine sales are transacted under such barter programs.

Syngenta also operates non-barter commodity price mitigation programs in certain countries, including South Africa, the Czech Republic and Slovakia. Certain of these programs assist growers by allowing those who purchase Syngenta products within the program to hedge, at no cost or risk to the grower, the price of an equivalent value of their crop via the commodity futures market. Participating growers are protected against crop price declines that may occur before harvest, which helps ensure their ability to pay Syngenta for its products, and retain their ability to profit from crop price increases. Syngenta does not retain any commodity price risk under these programs.

Production and Supply

Syngenta's combined Crop Protection and Seeds Production and Supply function plays an integral role in implementing Syngenta's strategy in a sustainable manner by assuring product delivery, facilitating delivery of integrated crop solutions, supporting growth plans, reducing costs and promoting efficient use of capital. Through the effective procurement, production and distribution of products, the function ensures that Syngenta meets its commitments to customers around the world. Production and Supply supports Syngenta's growth plans (particularly in emerging markets) and accelerates the building of expertise for scalability and efficiency.

The manufacture of chemical crop protection products and the production of seeds for sale to growers involve different processes.

Active ingredients used for Crop Protection products are manufactured at a limited number of sites located in Switzerland, the United States, the United Kingdom, China and India. Syngenta announced in December 2015 its intention to divest its active ingredient plant in Goa, India. Syngenta also operates a number of chemical formulation and packing sites strategically located close to the principal markets in which those products are sold. Syngenta operates major formulation and packing plants in Belgium, Brazil, China, France, India, South Korea, the United Kingdom, the United States and Switzerland. The formulation, fill and packaging operations in Switzerland will be closed in the latter part of 2016. Both the aforementioned site closures are part of the Accelerating Operational Leverage restructuring program, described further in Item 5.

Syngenta manages its Crop Protection supply chain globally and on a product-by-product basis, from raw materials through delivery to the customer, in order to maximize both cost and capital efficiency and responsiveness. Syngenta outsources the manufacture of a wide range of raw materials, from commodities through fine chemicals to dedicated intermediates and active ingredients. Sourcing decisions are based on a combination of logistical, geographical and commercial factors. Syngenta has a strategy of maintaining, when available, multiple sources of supply. Most purchases of supply chain materials are directly or indirectly influenced by commodity price volatility, due to price dependence on gas and oil. Total raw material spending was approximately 34 percent of Crop Protection sales in 2015.

Approximately 27 percent of Syngenta's raw material purchases for Crop Protection products are fine chemicals. Syngenta has entered into short- to medium-term contracts with many suppliers to provide consistent supply.

Approximately 9 percent of Syngenta's raw material purchases for Crop Protection products are readily available base chemicals that are subject to commodity chemical price volatility. Approximately another 6 percent of raw material purchases for crop protection products have an indirect exposure to commodity oil price volatility.

Approximately 14 percent of raw materials for Crop Protection products are sourced from China and India in local currencies and therefore are subject to cost fluctuations from movements in currency exchange rates. Exchange rate movements on Swiss Franc, Pound Sterling and Euro may also impact Syngenta's reported raw material costs; approximately 5 percent, 3 percent and 27 percent, respectively, of raw materials for Crop Protection products are purchased in those currencies. Syngenta engages in currency hedging activities to mitigate the impact of currency fluctuations on the cost of its raw material purchases.

Seeds for sale by Syngenta to growers are grown (multiplied) and harvested by independent contract farmers throughout the world. After the harvest, the raw seed is cleaned, calibrated, treated and packaged in Syngenta or third party processing plants, which are located as close to the intended markets as possible so as to achieve cost effectiveness and match the seeds with the growing conditions that are optimal for the variety. This also eases logistics for seed products that require secure storage and timely delivery for the growing season. The largest facilities are located in Argentina, Brazil, France, Hungary, India, Morocco, Spain, Denmark, Thailand, the United States and the Netherlands.

Due to Syngenta's global presence, it can engage in seed production year-round with a goal of mitigating weather-related seed production risk. In addition, because its facilities are located in both the northern and southern hemispheres, Syngenta can shorten the time required to multiply seeds from breeding to commercial production. This enables it to produce marketable quantities more quickly than if it was dependent on only one growing season.

Operating in the agribusiness sector, changes in commodity crop prices affect Syngenta's raw material costs for seed. The contracts with growers who multiply seed for Syngenta to sell as finished product typically contain terms allowing the multipliers to benefit from commodity seed price increases that may occur during the growing season and that the growers would have received had they been able to sell their crop in the market rather than to Syngenta as supply. Syngenta engages in hedging activities to mitigate the impact of this commodity price volatility on corn and soybean product costs.

Research and Development

Syngenta's research and development ("R&D") organization is dedicated to developing quality crop protection and seeds products, as well as crop-focused solutions which integrate multiple technologies. R&D focuses on taking a holistic approach to help customers grow their specific crop using the best technology to address their needs, be it a single technology, a combination of technologies, or technologies and services.

An open and collaborative culture is essential to foster interaction and innovation, both within the R&D organization and across Syngenta, as well as with collaborators and partners. In 2014 and 2015, a number of changes were initiated and made in R&D to simplify the organization with the goal of delivering an innovative pipeline more productively through improved ways of working and leveraging Syngenta's scale. Syngenta believes that R&D is now better placed to effectively and efficiently innovate across crops and regions, resulting in faster and more efficient development and registration of new products.

R&D has three principal units:

Research leverages the breadth of Syngenta's research expertise to innovate more productively;

Development comprises product-centric development units to drive pipeline delivery to meet grower and business needs; and

Platforms underpin the organization, including operations to drive effective implementation as well as the product safety & regulatory function to drive Syngenta's license to operate agenda.

Syngenta performs an extensive investigation of all safety aspects relating to its products. The human safety assessments address potential risks to both the users of the products and the consumers of food and feed, while in environmental safety Syngenta seeks assurance that the products will not adversely affect soil, water, air, flora or fauna.

To complement in-house expertise and bring in novel technologies, Syngenta actively seeks value-adding partnerships and collaborations to bring new offers to growers. It currently has over 400 R&D collaborations with universities, research institutes and commercial organizations around the world.

Syngenta is an R&D based company with total spending by its integrated business on research and development of \$1,310 million in 2015, \$1,376 million in 2014 and \$1,320 million in 2013.

Researching and developing crop protection products

R&D provides Syngenta with innovative new chemical solutions, biologicals and intellectual property with the potential to be combined with other technologies and create maximum value to growers and differentiation. New research areas are guided by the advancement of new technologies in partnership with the commercial crop teams based on customer need, technology, regulatory requirements and socio-political trends.

Syngenta has major research centers focused on identifying new active ingredients in Stein, Switzerland and Jealott's Hill, United Kingdom. Scientists work on the research and development of a portfolio of herbicides, fungicides, insecticides, nematicides and crop enhancing chemicals and biologicals, with broad applicability as foliar, soil and seed treatments for agriculture and Lawn and Garden customers.

Syngenta is continuously improving its research process. State-of-the-art synthetic chemistry and high-speed automated synthesis are used in concert to effectively prepare the quantity and quality of compounds for both high throughput and highly targeted biological screening. A crucial feature is the structured design approach to chemistry, which ensures that the chemical entities possess properties most likely to relate to the desired product profile, including potency, spectrum and safety parameters.

Once an active ingredient is ready for testing, the development team, supported by the global expertise of the trialing function, ensures that the work is efficiently and effectively completed to turn promising molecules into products that are safe to users and the environment, pass all registration requirements and meet customers' needs. Such development typically takes six to eight years. The active ingredient's efficacy and safety is assessed as early as possible in the development process and all data is compiled for registration and safe product use.

Syngenta tests compounds on target crops globally under different climatic conditions and in varying soils. In parallel, an industrial scale manufacturing process is identified and optimized, and appropriate formulations and packages are developed. In addition, R&D works to improve Syngenta's current chemical products by supporting the development of new mixtures, formulations and programs that bring new effects and opportunities to growers. Refreshing the existing product range is key to continued success in the face of competition, even after patent expiry.

Researching and developing seeds products

R&D is dedicated to creating new varieties of major crops having improved quality and productivity. This includes improving tolerance to pests and other environmental stresses as well as quality characteristics such as nutritional composition, consumer appeal and shelf life. Scientists focus on advancing the performance, stability and quality of seed varieties, not only for Syngenta's eight strategic crops, but also for over 50 food and feed crops in total.

Syngenta's biotechnology activities primarily take place at Research Triangle Park, NC, USA, for both research and development of key native and genetically modified traits. Activities at this site are supported by smaller laboratories around the world. In addition, Syngenta operates approximately 100 breeding and germplasm enhancement centers strategically located around the world.

Syngenta expects that end users such as livestock producers, grain processors, food processors and other partners in the food chain will continue to demand specific qualities in the crops they use as inputs. Syngenta has therefore built up and continues to develop an extensive germplasm library.

In addition to general research and development agreements with other companies and academic institutions around the world, Syngenta has entered into a number of targeted alliances with other enterprises in order to further broaden its germplasm and trait base with the goal of creating more valuable products.

Syngenta develops plants with desirable characteristics using both native traits breeding approaches, resulting in either conventional inbred lines or hybrids, and genetic engineering.

Conventional plant breeding involves crossing carefully chosen parent plants, then selecting the best plants from the resulting offspring to be grown on for further selection. Once the best lines have been selected, they are purified to create 'inbred' lines, in which every plant has the same characteristics, and the process of multiplying seeds begins.

For many crop varieties, including corn, rice, barley, sunflower, sugar beet, oilseed rape and many vegetables, Syngenta produces hybrid seeds, which means that the seed supplied to the grower is the result of the first cross between selected parents; these seeds are unique in expressing 'hybrid vigor', which enables improved yield, performance stability and better quality.

For certain crops, Syngenta also develops transgenic plants where one or more genes of interest have been introduced to a plant via recombinant DNA technology instead of the plant acquiring them through conventional breeding.

Modern technologies such as marker-assisted selection, production of doubled haploids (genetically pure plant lines that offer a quick route to new gene combinations for specific, desirable improvements) for accelerated breeding and crop modeling allow breeders to develop new varieties much more rapidly and accurately than in the past. However this is still a lengthy process; today it can take five to seven years from first cross to market, and even longer if there is the need for a government approved market authorization.

Biofuels are an important market for corn and sugar cane growers. Syngenta is involved in research and development on crops that make biofuel production more efficient and sustainable. In particular, Syngenta supports current biofuels development to get to the next phase of efficient transformation of plant material into transportation fuel.

Intellectual Property

Syngenta protects its investments in R&D, manufacturing and marketing through patents, design rights, trademarks, trade secrets, plant variety protection certificates, plant breeders' rights and contractual language placed on packaging. The level and type of protection varies from country to country according to local laws and international agreements. Syngenta has one of the broadest patent and trademark portfolios in the industry and enforces its intellectual property rights, including through litigation if necessary.

In addition to patent protection for a specific active substance or for seeds (inbreds and varieties) and genomic-related products, patent protection may be obtained for processes of manufacture, formulations, assays, mixtures, and intermediates. These patent applications may be filed to cover continuing research throughout the life of a product and may remain in force after the expiry of a product's *per se* patents in order to provide ongoing protection. The territorial coverage of patent filings and the scope of protection obtained vary depending on the circumstances and the country concerned.

Patents in respect of plant-related inventions may cover (i) transgenic plants and seeds gene effects, (ii) genetic constructs and individual components thereof and enabling technology for producing transgenic plants and seeds, and (iii) new breeding technologies such as marker-assisted breeding and products obtained thereby. The territorial coverage of patent filings and the scope of protection obtained vary depending on the circumstances and the country concerned.

Trademark protection may be obtained to cover a trademark for a specific active substance or seed variety and there may be more than one trademark covering the same active substance or seed variety. Other trademarks may cover formulations, mixtures, intermediates and a variety of ancillary services. The trademarks may remain in force after the expiry of a product's patents in order to provide ongoing protection. The territorial cover of trademark filings and the scope of protection obtained vary depending on the circumstances and the country concerned.

Syngenta licenses certain of its intellectual property rights to third parties and also holds licenses from other parties relating to certain of Syngenta's products and processes. Syngenta respects the intellectual property rights of others.

Competitive Environment

Syngenta's key competitors are dedicated agribusinesses or large chemical companies headquartered in Western Europe and North America and comprise BASF, Bayer, Dow, DuPont and its Pioneer subsidiary, and Monsanto. Syngenta and these companies in 2015 accounted for about 60 percent of the worldwide market for crop protection and seeds products.

Companies in the crop protection business compete on the basis of strength and breadth of product range, product development and differentiation, geographical coverage, price and customer service. In many countries, generic producers of off-patent crop protection compounds are additional competitors to the research-based companies in the commodity segment of the market.

The main competitive factor in the seeds industry remains the quality of genetics and the increasing importance of traits. Historically, competition in the seeds industry has been fragmented, with small producers competing in local markets. With the emergence of biotechnology, the seeds industry has become research intensive. The majority of the transgenic products commercialized to date are traits that improve performance and farming efficiency in major world crops such as corn, soybean, cotton and canola (input traits). As a result, companies having access to a broad genetic range of germplasm as a platform for trait commercialization have a key competitive advantage. In addition to Monsanto, Pioneer, Bayer and Dow, other significant competitors in the seeds business are: Vilmorin, KWS, and Takii.

In the future, Syngenta expects that increased emphasis will continue to be placed on developing products that provide benefits to food and feed processors, fuel production, retail trade and consumers (output traits). One future competitive advantage is expected to be the ability to develop partnerships to allow delivery of biotechnology traits to the target market sectors.

Lawn and Garden

Lawn and Garden leverages Syngenta's agricultural chemical technologies into the adjacent markets of (i) consumer home and garden, (ii) turf, landscape and professional pest management and (iii) ornamental flower growers, where it is also a major supplier of flower seeds, cuttings and young plants.

Lawn and Garden is a global business active in all major regions and sales are made primarily via distributors through to its professional customer base.

Consumer home and garden products are primarily based on Syngenta's fungicide, herbicide and insecticide range and mostly sold in bulk to wholesale companies for repackaging and sale to retailers.

Turf, landscape and professional pest management provides pesticides products in four markets: turf (primarily golf courses), sold through specialized distributors, dealers and professional applicators; pest management, sold primarily through distributors and directly to some large customers; vector control (control of disease spreading insects and pests), where sales are made to governments or NGOs, with some sales through distributors; and vegetation management (trees, forestry and aquatics), where the primary customers are distributors or local governments.

In the turf market specifically, Syngenta provides disease, insect and weed control and turf grass growth regulators to clients including professional golf superintendents, green keepers, sports turf managers and professional lawn care operators working on recreational sites and residential and commercial landscapes.

Ornamental flowers provides growers of ornamentals and pot and bedding plants, bulbs and cut flowers with a range of chemical and biological crop protection solutions. In addition, it supplies seeds, cuttings and young plants to distributors, growers and retailers serving the pot and bedding plant markets. Syngenta's flowers business (Syngenta Flowers) has a heritage dating back over 140 years and is active in all major regions. As the global leader in seeds and cuttings, Syngenta Flowers offers a wide range of pot and bedding plant genetics.

Focusing on the pot and bedding plan markets, Syngenta Flowers engages in breeding, producing and distributing flower seeds, cuttings and young plants. It has customers in over 80 countries with key markets comprising the US, Germany, France, UK, Netherlands and Japan. Sales are made primarily via distributors and brokers in North America and through distributors and directly to growers in Europe.

Key Marketed Products

Lawn and Garden offers a range of specialized products for use in the consumer home and garden, turf and landscape, ornamental controls and flower genetics markets. A large number of these products include active ingredients that are also used in Syngenta's Integrated Business described above.

Ornamental controls, consumer home and garden, and turf and landscape brands include:

- **Abamectin** (VERTIMEC®) is a leading ornamental insecticide.
- **Azoxystrobin** (HERITAGE®/ORTIVA®/AMISTAR®) is a leading fungicide for use on turf, primarily golf courses, and in ornamentals.
- **Prodiamine** (BARRICADE®) is a leading pre-emergence grass and broad-leaved weed herbicide in turf.
- SUNJET® Flora (**isopyrazam and azoxystrobin**) for foliar application and PLENTRIX® (**azoxystrobin and mefenoxam**) for soil drench are the first Lawn and Garden fungicide brands specifically for ornamentals.
- **Thiamethoxam** (ACTARA®) is an insecticide highly active at low use rates against a broad spectrum of soil and sucking insects.
- **Trinexapac-Ethyl** (PRIMO MAXX®) is a herbicide on turf that prohibits vertical growth.

Professional pest management products for use in controlling insect and rodent pests include:

- **Primiphos-methyl** (ACTELLIC®) is an insecticide used for indoor residual spray programs to control the spread of malaria and other vector-borne diseases. Recently re-launched as an encapsulated formulation for longer residual activity, ACTELLIC® CS has gained World Health Organization approval and is increasingly used to eradicate mosquitoes which are resistant to the pyrethroid insecticide class.
- **Brodifacoum** (KLERAT®) is a rodenticide for both professional applicators and consumer use in homes and gardens.
- **Chlorantraniliprole** (ALTRISSET®/ACELEPRYN®) is a new class of insecticide for the control of termites in building structures and also white grubs and other pests in turf.
- **Indoxacarb** (ADVION®/ARILON®) is an insecticide for application by professional pest control operators for the control of ants, cockroaches and other general insect pests.

Flower genetics brands include GOLDFISCH®, GOLDSMITH® SEEDS, YODER® and SYNGENTA® FLOWERS. Products include a full range of flower seeds, cuttings and young plants which Syngenta sells to professional flower growers. Syngenta focuses on breeding a full range of innovative flower varieties, including popular bedding plants such as viola, begonia, New Guinea impatiens, pelargonium and petunia; pot plants, such as cyclamen and poinsettia; cuttings for, amongst others, the growing market of hanging baskets, such as impatiens and verbena; and a wide range of attractive perennials.

Recently Launched Products

Recently launched products for use in ornamentals controls are:

- **BIOLINE® products** – various predatory and beneficial insects supporting growers in North America to improve integrated production and in certification efforts.
- **HICURE™** – amino acids – a biostimulant used in cut flowers for mitigating climatic stress and enabling the rose plant to build a higher number of stems.
- **NEMATHORIN® 150 EC** – fosthiazate¹² – controls soil nematodes in cut flower production.
- **MAINSRING®** – cyantraniliprole – a broad spectrum insecticide to control a wide range of ornamental pests.
- **MURAL™** – solatenol and azoxystrobin – for treatment of powdery mildew disease.

Recently launched products for use in Turf, landscape and professional pest management are:

- **BRISKWAY®** – Fungicide (azoxystrobin and difenoconazole) – broad-spectrum fungicide for prevention and control of certain diseases in golf course turf grasses.
- **ZYROX® Fly Bait** – granular fly control insecticide based on Cyantraniliprole which offers a new mode of action resistance management tool for controlling nuisance flies in urban, rural and commercial markets.
- **FERENCE®** – insecticide for professional turf applications. Based on Cyantraniliprole, FERENCE® helps golf course superintendents systemically control annual bluegrass weevil at all larval stages.
- **VELISTA®** – novel penthiopyrad SDHI class fungicide providing protection against a wide range of fungal diseases on turf grasses.

¹² Fosthiazate is licensed from ISK Biosciences Corporation.

- **HERITAGE[®] ACTION** – azoystrobin and acibenzolar-s-methyl - providing both broad spectrum protection against fungi and plant health benefits.
- **APPEAR[®]** – potassium phosphite - systemic pigmented fungicide for the control of diseases caused by pythium and other pathogens on golf courses.

In Flowers, Syngenta introduces over 100 new and improved varieties and series every year. Some of the more unique introductions during the year were:

- **BIG KISS[™]** – F1 Seed Gazania - series with uniquely super-sized flowers up to 12 cm diameter.
- **CARTWHEEL[®]** Strawberry Twist – F1 Seed Gerbera - first double flowered bi-color Gerbera from seed which achieved the Fleurostar Award 2014.
- **CALIENTE[®]** – vegetative Pelargonium - color additions which strengthen this interspecific geranium series with superior garden performance
- **CALLIOPE[®]** – vegetative Pelargonium - color additions which strengthen this interspecific geranium series with superior garden performance
- **SANGUNA[®]** – vegetative Petunia – early and continuous flowering.

Products in Late Stage Development

Syngenta's pipeline of products under development that have potential application in Turf, landscape and professional pest management, Ornamentals, and Home and garden also have application in its Integrated Business. For further information on this pipeline, see Products in Late Stage Development for Syngenta's Integrated Business above.

Syngenta Flowers has a rich pipeline of products under development, which extends beyond 2020 and involves projects covering all product lines.

Production

Syngenta's crop protection production process and facilities are leveraged to produce and source the range of Turf, landscape and professional pest management, Ornamentals and Home and garden chemical products marketed by Lawn and Garden. For a description of the manufacturing process for these products, see Production for Syngenta's Integrated Business above.

Syngenta Flowers uses its own seed production facilities in Guatemala, Turkey and the Netherlands to produce, clean, pellet, coat and package seed. In addition, independent contract growers in Turkey and Indonesia are used to supplement capacity and capability.

Due to Syngenta's global presence, it can engage in seed production year-round with a goal of mitigating weather-related seed production risk. In addition, because its facilities are located in both the northern and southern hemispheres, Syngenta can shorten the time required to multiply seeds from breeding to commercial production. This enables it to produce marketable quantities more quickly than if it was dependent on only one growing season.

Syngenta Flowers sources vegetative cuttings from its own cutting production facilities in Kenya, Ethiopia, Guatemala and the USA, and from contract growers, notably in Mexico.

Marketing and Distribution

Lawn and Garden has marketing organizations in all its major markets with dedicated sales forces that provide customer and technical service, product promotion and market support. In cases where the crop protection market is not segmented into professional turf, landscape and professional pest management, ornamental or home and garden markets, the Syngenta integrated business organization is used to market Lawn and Garden products to customers.

The Turf, landscape and professional pest management business of Syngenta operates a business-to-business model supplying chemical controls to professional customers. Products are sold to the end user through independent distributors and dealers, most of which also handle other manufacturers' products. Syngenta's products normally are sold through a two-step or three-step distribution chain as described in Marketing and Distribution for Syngenta's Integrated Business above.

Syngenta Flowers seed and vegetative products are marketed throughout the world through well-known brands, some of which have been established for over 100 years. The Syngenta Flowers brand is an umbrella brand representing the entirety of Syngenta's offer in flower seeds, cuttings and young plants. Syngenta Flowers uses the GOLDFISCH® brand and the GOLDSMITH® and YODER® brands as portfolio brands. Syngenta's sales force markets the majority of Syngenta's brands, either to customers directly, in partnership with distributors, or through a network of dealers. In addition, Syngenta Flowers distributes and brokers its products and product forms through FLORIPRO SERVICES® in Europe. The product range of Flower seeds covers 200 seeds series in 70 classes, while the vegetative range covers 120 series in 81 crops.

Syngenta's marketing activities are directed towards distributors, consultants and growers. They consist of a broad range of advertising and promotional tools, such as meetings with growers and distributors, field demonstrations, advertisements in specialized publications, direct marketing activities, or information via the Internet.

Research and Development

Research and development to provide Syngenta with innovative new chemical solutions and intellectual property for its Turf, landscape and professional pest management, Ornamentals, and Home and garden business is conducted at research centers used for crop protection product research and development in its Integrated Business. For further information, see Research and Development for Syngenta's Integrated Business above.

Flowers genetics research and development is dedicated to creating new varieties of major flower genetics having improved quality and productivity, either alone or in combination with other technologies. Syngenta's research and innovation provide the grower and retail markets with a choice of new genetics, shapes and colors of continuously improved longevity, stress tolerance and drought and disease resistance. Syngenta has major Flowers research centers in Enkhuizen, Holland and Gilroy, California, USA, each of which is focused on identifying new or improved varieties of genetics with unique traits.

The total spent on research and development in Lawn and Garden was \$52 million in 2015, \$54 million in 2014 and \$56 million in 2013.

Intellectual Property

Syngenta's Turf, landscape and professional pest management, Ornamentals, and Home and garden products are largely derived from the same products produced for crop protection in its Integrated Business. For further information regarding how Syngenta protects its intellectual property related to these products, see Intellectual Property for Syngenta's Integrated Business above.

Syngenta Flowers maintains the ownership and controls the use of its seeds and genomic-related products and processes by means of intellectual property rights, including but not limited to the use of patents, trademarks, licenses, trade secrets, plant variety protection certificates and contractual language placed on packaging. The level of protection varies from country to country according to local laws. Syngenta Flowers licenses certain of its intellectual property rights to third parties and also holds licenses from other parties relating to certain of Syngenta's products and processes.

Competitive Environment

The home and garden chemical controls market is impacted by the shift of business through mega retail channels and crowded shelf space. Syngenta's main competitors in this market include Bayer and regional private labels.

The key competitors in the turf, landscape and professional pest management markets are the leading agribusiness companies based in Western Europe and North America supplying crop protection chemicals which are generally specifically branded and tailored to these specialized markets. These companies compete primarily on the basis of product innovation and portfolio breadth. Additional competition comes from generic manufacturers in the off-patent segments. Increasingly, customer service, integrated programs and more holistic solution offers are being introduced to address broader unmet customer needs and further differentiate the major innovation companies from generics. Syngenta's main competitors in these markets are Bayer, BASF and Dow.

The main competitive factors in the flowers industry remain the quality of genetics and the increasing importance of unique traits to enhance growers' ability to produce as well as improving garden performance for consumers. Historically, and still to a large degree, flowers competition in the seeds industry has been fragmented, with small producers competing in local markets. The traditional grower market has evolved into a mass market of commodity products distinguished by low differentiation and overcapacity increasingly supplying a rapidly consolidating and competitive retail sector. The market opportunities are in increasing presence along the value chain towards retail and delivering to the consumer unique, higher quality plants with improved garden performance. At present, Syngenta Flowers' main competitors in the seeds business are Ball and Sakata and in the vegetative business are Dummen Orange and Florensis.

Government Regulations

The field-testing, production, import, marketing and use of Syngenta's products are subject to extensive regulation and numerous government approvals. Registration procedures apply in all major markets.

Products must obtain governmental regulatory approval prior to marketing. The regulatory framework for such products is designed to ensure the protection of the consumer, the grower and the environment. Examples of the regulatory bodies governing Syngenta's products include the US Environmental Protection Agency, the US Department of Agriculture and the US Food and Drug Administration.

All biotechnology products are subject to intense regulatory scrutiny and Syngenta conducts extensive studies to ensure products are safe for both consumers and the environment. An extensive Syngenta network of regulatory experts around the world ensures compliance and continued dialogue with the authorities regarding regulatory submissions, insect resistance management programs and participation in further development of the biotech regulatory framework.

Governmental regulatory authorities perform risk assessments on genetically modified ("GM") seed products to ensure the safety of the resulting plants and the food and feed derived from them. Syngenta must obtain regulatory approvals for both cultivation and for import of products thereof into key importing countries that have functioning regulatory systems. Cultivation countries for Syngenta's GM seed currently include the US, Canada, Brazil, Argentina, Vietnam, Paraguay, Uruguay and the Philippines. Key import countries are defined based on the product and cultivation market. "Stacked" products developed through breeding to contain multiple GM traits are also subject to regulation in certain countries. Approvals in some countries are time limited and must be renewed on a periodic basis to ensure that each product adheres to current regulatory standards. Some countries also require safety monitoring and insect resistance management after product commercialization. Additionally, registration of new plant varieties, whether transgenic or not, is required in most countries, but not in the USA.

Government regulations, regulatory systems, and the politics that influence them vary widely among jurisdictions and change often. Obtaining necessary regulatory approvals is time consuming and costly, and data requirements for approvals continue to increase. There can be no guarantee of the timing or success in obtaining approvals.

Environment

Syngenta designed its environmental management program with the aim of ensuring that its products and their manufacture pose minimal risks to the environment and humans. The crop protection industry is subject to environmental risks in three main areas: manufacturing, distribution and use of product. Syngenta aims to minimize or eliminate environmental risks by using appropriate equipment, adopting best industry practice and providing grower training and education.

The entire chain of business activities, from research and development to end use, operates according to the principles of product stewardship. Syngenta is strongly committed to the responsible and ethical management of its products from invention through ultimate use. Syngenta employs environmental scientists around the world who study all aspects of a product's environmental behavior.

Specially designed transportation and storage containers are used for the distribution of hazardous products and efficient inventory control procedures minimize the creation of obsolete stocks.

Syngenta has developed a rigorous screening and development process in order to mitigate risks relating to the use of its products. All active substances and products must meet both Syngenta's internal standards and regulatory requirements.

Syngenta provides support to growers on a local level such as training in application techniques and assistance in calibrating spray equipment in order to promote safe handling of its products. Syngenta extends product stewardship long after sales in several ways, for example, by collecting and safely destroying outdated products, and providing returnable containers to reduce waste.

Crop protection products are subject to rigorous registration procedures, which are aimed at ensuring safe product usage in the field. In addition to complying with these regulatory requirements, Syngenta has adopted its own Health, Safety and Environment (“HSE”) management system. This provides a clear framework of management processes applicable at all sites, whatever the regulatory requirements in the country in which the site is situated.

Syngenta maintains a register of sites to identify manufacturing and distribution sites and locations that may have been contaminated in the past. The register is the basis for the allocation of appropriate provisions and action programs regarding measures to be taken. A risk portfolio is prepared for each site and reviewed annually. The risk portfolio is also applied to third-party manufacturers in order to identify and exclude poorly performing companies.

See Notes 2, 19 and 25 to Syngenta’s consolidated financial statements in Item 18 for a further discussion of environmental matters.

Organizational Structure

The following are the significant legal entities in the Syngenta group of companies (the "Group"). The disclosure criteria are as follows:

- Companies directly owned by Syngenta AG
- Companies indirectly owned by Syngenta AG with annual sales in excess of \$100 million or equivalent or total assets in excess of one percent of total Group assets
- Companies with a financing function

None of the significant legal entities are listed. Please refer to Note 29 in the consolidated financial statements in Item 18 for the appropriate consolidation method applied to each type of entity.

Country	Municipality	Capital and voting rights owned by Syngenta ¹	Local currency	Share capital in local currency	Function of company
Argentina					
Syngenta Agro S.A.	Buenos Aires	100%	ARS	2,801,002,218	Sales/Production
Australia					
Syngenta Australia Pty Limited	North Ryde	100%	AUD	83,942,909	Sales/Production/Development
Brazil					
Syngenta Proteção de Cultivos Ltda.	São Paulo	100%	BRL	2,522,624,609	Sales/Production/Research
Canada					
Syngenta Canada Inc.	Guelph	100%	CAD	–	Sales/Research
China					
Syngenta (China) Investment Company Limited	Shanghai	100%	USD	46,660,810	Holding/Sales
France					
Syngenta France S.A.S.	Saint-Sauveur	100%	EUR	50,745,240	Sales/Production/Development
Syngenta Holding France SA ²	Guyancourt	100%	EUR	99,965,085	Holding/Finance
Germany					
Syngenta Agro GmbH	Maintal	100%	EUR	2,100,000	Sales
Hungary					
Syngenta Hungary Kft.	Budapest	100%	HUF	280,490,000	Sales/Production/Development
India					
Syngenta India Limited	Pune	96%	INR	164,718,540	Sales/Production
Indonesia					
PT Syngenta Indonesia	Jakarta	100%	IDR	58,122,874,000	Sales/Production/Development
Italy					
Syngenta Italia S.p.A.	Milano	100%	EUR	5,200,000	Sales/Production/Development
Japan					
Syngenta Japan K.K.	Tokyo	100%	JPY	–	Sales/Production/Research
South Korea					
Syngenta Korea Ltd.	Seoul	100%	KRW	127,882,000,000	Sales/Production/Development
Mexico					
Syngenta Agro, S.A. de C.V.	México City, D.F.	100%	MXN	157,580,000	Sales/Production/Development
Netherlands					
Syngenta Seeds B.V.	Enkhuizen	100%	EUR	488,721	Holding/Sales/Production/Research
Syngenta Finance N.V.	Enkhuizen	100%	EUR	45,000	Finance
Syngenta Treasury N.V.	Enkhuizen	100%	EUR	90,001	Holding/Finance
Panama					
Syngenta Crop Protection S.A.	Panama City	100%	USD	101,000	Sales/Distribution

Country	Municipality	Capital and voting rights owned by Syngenta ¹	Local currency	Share capital in local currency	Function of company
Paraguay					
Syngenta Paraguay S.A.	Asunción	100%	PYG	192,000,000,000	Sales/Production
Poland					
Syngenta Polska Sp.z.o.o.	Warsaw	100%	PLN	22,264,000	Sales
Russian Federation					
OOO Syngenta	Moscow	100%	RUB	895,619,000	Sales/Distribution
Spain					
Syngenta España S.A.	Madrid	100%	EUR	7,544,828	Distribution/Development/Production
Switzerland					
Syngenta Supply AG	Basel	100%	CHF	250,000	Sales
Syngenta Crop Protection AG ²	Basel	100%	CHF	257,000	Holding/Sales/Production/Research
Syngenta Crop Protection Monthey SA ²	Monthey	100%	CHF	70,000,000	Production
Syngenta Crop Protection Münchwilen AG ²	Münchwilen	100%	CHF	5,010,000	Production/Research
Syngenta Crop Protection Schweizerhalle AG in Liq. ²	Muttenz	100%	CHF	103,000	in Liquidation
Syngenta Agro AG	Dielsdorf	100%	CHF	2,100,000	Sales/Production/Research
Syngenta Agroservices Asia AG ²	Basel	100%	CHF	650,000	Distribution/Consulting
Syngenta Finance AG ²	Basel	100%	CHF	10,000,000	Finance
Syngenta International AG ²	Basel	100%	CHF	100,000	Management Services
Syngenta Participations AG ²	Basel	100%	CHF	25,000,020	Holding
Syngenta South Asia AG ²	Basel	100%	CHF	9,000,000	Holding/Finance
Ukraine					
TOV Syngenta	Kiev	100%	UAH	2,009,240,000	Sales/Research
United Kingdom					
Syngenta Limited	Guildford	100%	GBP	85,000,000	Holding/Production/Research
Syngenta UK Limited	Fulbourn	100%	GBP	500	Sales/Research
USA					
Syngenta Crop Protection, LLC	Greensboro	100%	USD	100	Sales/Production/Research
Syngenta Seeds, LLC	Minnetonka	100%	USD	–	Sales/Production/Research
Syngenta Corporation	Wilmington	100%	USD	100	Holding/Finance
GreenLeaf Genetics LLC	Minnetonka	100%	USD	100	For Liquidation
Vietnam					
Syngenta Vietnam Ltd.	Bien Hoa City	100%	USD	45,000,000	Sales/Production

1 The capital and voting rights in 2015 have not changed compared with 2014

2 Direct holding of Syngenta AG

Property, Plants and Equipment

Syngenta's principal executive offices are located in Basel, Switzerland. Syngenta's businesses operate through a number of offices, research facilities and production sites. The following is a summary of Syngenta's principal properties:

Locations	Freehold/ Leasehold	Approx. area (thou. sq. ft.)	Principal use
Rosental, Basel, Switzerland	Freehold	300	Headquarters, global functions
Monthey, Switzerland	Freehold	10,400	Production
Stein, Switzerland	Freehold	4,000	Research
Dielsdorf, Switzerland	Freehold	200	Administration, marketing, production
Kaisten, Switzerland	Freehold	100 ¹	Production
Münchwilen, Switzerland	Freehold	600	Research, production
Seneffe, Belgium	Freehold	2,500	Production
Ghent, Belgium	Leasehold	100	Administration, research
Aigues-Vives, France	Freehold	1,500 ²	Production
Nérac, France	Freehold	600	Production
St Pierre, France	Freehold	1,500	Production
Saint-Sauveur, France	Freehold	200	Research, production
Sarrians, France	Freehold	3,200	Research
Bad Salzuflen, Germany	Leasehold	34,400	Research, production
Mezotur, Hungary	Freehold	1,300	Production
Enkhuizen, The Netherlands	Freehold	3,500	Administration, research, marketing, production
Landskrona, Sweden	Freehold	8,700	Research, production, marketing
Jealott's Hill, Berkshire, UK	Freehold	28,300	Research
Huddersfield, West Yorkshire, UK	Freehold	10,800	Production
Grangemouth, Falkirk, UK	Freehold	900	Production
Greensboro, North Carolina, USA	Freehold	3,000	US headquarters, research
Minnnetonka, Minnesota, USA	Freehold	100	Administration
St. Gabriel, Louisiana, USA	Freehold	54,700	Production
Greens Bayou, Texas, USA	Freehold	10,900 ³	Production
Research Triangle Park, North Carolina, USA	Freehold	3,400	Research
Gilroy, California, USA	Freehold	2,500	Production, research, marketing
Lone Tree, Iowa, USA	Freehold	1,300	Production
Omaha, Nebraska, USA	Freehold	1,800	Production
Phillips, Nebraska, USA	Freehold	2,600 ⁴	Production
Waterloo, Nebraska, USA	Freehold	1,700 ⁵	Production
Pasco, Washington, USA	Freehold	1,700	Production
Clinton, Illinois, USA	Freehold	1,400	Research
Stanton, Minnesota, USA	Freehold	18,000	Research
Slater, Iowa, USA	Freehold	13,700	Research
Woodland, California, USA	Freehold	6,400	Production, research
Venado Tuerto, Argentina	Freehold	1,000	Production
Formosa, Brazil	Freehold	2,200	Production
Itápolis, Brazil	Freehold	500	Production
Ituiutaba, Brazil	Freehold	2,200	Production
Matão, Brazil	Freehold	500	Production
Paulinia, Brazil	Freehold	6,800	Production
Uberlandia, Brazil	Freehold	27,000	Research
Amatitlan, Guatemala	Freehold	3,100	Production
Kapok, Guatemala	Freehold	2,000	Production
Nantong, China	Leasehold	1,900	Production
Beijing, China	Leasehold	300	Research
Goa, India	Freehold	8,700	Production, research
Iksan, South Korea	Freehold	900	Production
Koka, Ethiopia	Leasehold	9,700	Production
Pollen, Kenya	Freehold	4,800	Production
Thika, Kenya	Freehold	3,000	Production

1 Surface area of building/factory that Syngenta owns; land (143 thousand square feet) is owned by a third party

2 Only approximately 900 thousand square feet are currently used and developed

3 Only approximately 5,900 thousand square feet are currently used and developed

4 Only approximately 1,700 thousand square feet are currently used and developed

5 Only approximately 1,200 thousand square feet are currently used and developed

Please also see “Business Overview” above for a description of the products produced at the various properties listed above.

In 2015, Syngenta completed the approximately \$80 million project, which commenced in 2013, at Syngenta’s Formosa site in Brazil to expand production capacity by approximately 30 percent.

In 2013, Syngenta announced plans to invest approximately \$90 million by the end of 2018 on the expansion of its research and development operations on Syngenta’s research campus in Research Triangle Park, North Carolina, USA, including further capacity expansion, and upgraded laboratory and other facilities. Research at the expanded site will focus on traits that can better tolerate climate variability, combat plant stresses such as drought, and enhance crop productivity and plant performance. In addition to the current focus on corn and soybean, research will be expanded to incorporate other crops such as cereals, rice, vegetables and sugar cane. Spending on the project in 2015 was approximately \$30 million and cumulative spending totals approximately \$80 million.

In 2014, Syngenta started work at its Monthey, Switzerland site to increase the production capacity of SDHI fungicides by 900 metric tons per year by 2017 at an estimated cost of \$65 million. Spending on the project in 2015 was approximately \$30 million and cumulative spending totals approximately \$40 million.

In 2014, Syngenta announced plans to invest an additional approximately \$100 million at its Kaisten, Switzerland site to increase production capacity of an intermediate to one of its major Selective herbicide products by an additional approximately 30 percent to meet increasing demand. Spending on the project in 2015 was approximately \$30 million and cumulative spending totals approximately \$70 million. Due to lower than previously anticipated demand growth, completion of the project has been postponed to 2016.

Syngenta is refurbishing and modernizing its Basel headquarters under a program that will run over the period through 2017 and is estimated to cost approximately \$200 million, with approximately 85 percent spent as of December 31, 2015.

The approximately \$90 million project at Syngenta’s Nantong, China facility to increase production capacity of crop protection products by approximately 1,000 metric tons per year to meet increasing demand was completed in 2015.

The approximately \$50 million project at Syngenta’s Stein, Switzerland research site to expand and upgrade its biological sciences facilities in order to meet long-term growth objectives was completed in 2015.

In 2015, Syngenta announced plans to invest \$20 million at its Seedcare Institute facility located in Stanton, Minnesota, USA to expand existing infrastructure to meet long-term business objectives. Spending on the project during 2015 was less than \$10 million.

ITEM 4A – UNRESOLVED STAFF COMMENTS

None.

ITEM 5 — OPERATING AND FINANCIAL REVIEW AND PROSPECTS

Introduction

The following discussion includes forward-looking statements subject to risks and uncertainty. See “Forward-looking statements” at the beginning of this document. This discussion also includes non-GAAP financial data in addition to GAAP results. See Appendix A to this section and Note 1 to the financial highlights in Item 3 for a reconciliation of this data and explanation of the reasons for presenting such data.

Constant exchange rates

Approximately 51 percent of Syngenta’s sales and 65 percent of Syngenta’s costs in 2015 were denominated in currencies other than US dollars. Therefore, Syngenta’s results for the period covered by the review were significantly impacted by movements in exchange rates. Sales in 2015 were 11 percent lower than 2014 on a reported basis, but were 1 percent higher when calculated at constant rates of exchange. The Company therefore provides analysis of results calculated at constant exchange rates (“CER”) and also actual results to allow an assessment of performance before and after taking account of currency fluctuations. To present CER information, current period results for entities reporting in currencies other than US dollars are converted into US dollars at the prior period’s exchange rates, rather than the exchange rates for this year. An example of this calculation is included in Appendix A of this section.

Overview

Syngenta is a world leading agribusiness operating in the crop protection, seeds and lawn and garden markets. Crop protection chemicals include herbicides, insecticides, fungicides and seed treatments to control weeds, insects and diseases in crops, and are essential inputs enabling growers around the world to improve agricultural productivity and food quality. In Seeds, Syngenta operates in the high value commercial sectors of field crops (including corn, oilseeds, cereals and sugar beet) and vegetables. The Lawn and Garden business provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

Syngenta’s results are affected, both positively and negatively, by, among other factors: general economic conditions; weather conditions, which can influence the demand for certain products over the course of a season and the quantity and cost of seeds supply; commodity crop prices; and exchange rate fluctuations. Government measures, such as subsidies or rules regulating the use of agricultural products, genetically modified seeds, or areas allowed to be planted with certain crops, also can have an impact on Syngenta’s industry. Syngenta’s results are also affected by the growing importance of biotechnology to agriculture and the use of genetically modified crops. In future years, climate change may have both positive and negative impacts on Syngenta’s results. Climate change may make growing certain crops more or less viable in different geographic areas, but is not likely to reduce overall demand for food and feed. Syngenta currently sells and is developing products to improve the water productivity of plants and increase tolerance to drought and heat. Legislation may be enacted in the future that limits carbon dioxide emissions in the manufacture of Syngenta’s products or increases the costs associated with such emissions. Syngenta works actively to make its production operations more energy efficient and to reduce the rate of carbon dioxide emissions per unit of sales revenue.

Syngenta operates globally to capitalize on its technology and marketing base. Syngenta's largest market in 2015 was Europe, Africa and the Middle East, which represented approximately 31 percent of consolidated sales (2014: 32 percent) followed by Latin America and North America, each at 27 percent (2014: 29 percent and 25 percent, respectively) and Asia Pacific at 15 percent (2014: 14 percent). Markets for agricultural products in Europe, Africa and the Middle East and North America are seasonal resulting in both sales and operating profit for Syngenta in these markets being weighted towards the first half of the calendar year, which largely reflects the northern hemisphere planting and growing cycle. Latin America has its main selling season in the second half of the year due to its location in the southern hemisphere. Asia Pacific sales and operating profit are more uniform throughout the year.

Syngenta's most significant manufacturing and research and development sites are located in Switzerland, the United Kingdom ("UK"), the United States of America ("USA" or "US"), China and India. Syngenta has major research centers focused on identifying new active ingredients in Stein, Switzerland and Jealott's Hill, UK. Syngenta's primary center for agricultural genomics and biotechnology research is in the USA.

References in this document to market share estimates are based where possible on global agrochemical and biotechnology industry information provided by a third party or on information published by major competitors and are supplemented by Syngenta marketing staff estimates.

The consolidated financial statements in Item 18 are presented in US dollars, as this is the major currency in which revenues are denominated. However, significant, but differing proportions of Syngenta's revenues, costs, assets and liabilities are denominated in currencies other than US dollars. Approximately 15 percent of sales in 2015 were denominated in Euros, while a significant proportion of costs for research and development, administration, general overhead and manufacturing were denominated in Swiss francs and British pounds sterling (approximately 19 percent in total). Sales in Swiss francs and British pounds sterling together made up approximately 2 percent of total sales. Marketing and distribution costs are more closely linked to the currency split of the sales. As a result, operating profit in US dollars can be significantly affected by movements in exchange rates, in particular movements of the Swiss franc, British pound sterling, Euro and Brazilian real, relative to the US dollar, and the relative impact on operating profit may differ from that on sales. Sales in emerging markets are over 50 percent of Syngenta's total sales. Where it is not commercially disadvantageous, Syngenta sets sales prices in these markets in US dollars, particularly in parts of Latin America and the CIS. However, in many emerging territories Syngenta sells in the local currency of the countries in the territory and as a result has a long exposure to multiple emerging market currencies. The effects of currency fluctuations within any one year have been reduced by risk management strategies such as hedging and the aforementioned US dollar sales pricing. For further information on these strategies please refer to Note 27 of the consolidated financial statements in Item 18.

The consolidated financial statements in Item 18 are based upon Syngenta's accounting policies and, where necessary, the results of management estimations. Syngenta believes that the critical accounting policies and estimations underpinning the financial statements are in the areas of (i) royalty and license income, (ii) impairment, (iii) classification of assets and liabilities to be divested, (iv) foreign currency translation of intercompany transactions, (v) acquisition accounting, (vi) adjustments to revenue and trade receivables, (vii) seeds inventory valuation and allowances, (viii) environmental provisions, (ix) defined benefit post-employment benefits, including pension asset ceiling, (x) deferred tax assets and (xi) uncertain tax positions. These policies are described in more detail in Notes 2 and 29 to the consolidated financial statements in Item 18.

Summary of results

Net income in 2015 was 17 percent lower than 2014 as cost savings from the ongoing restructuring and local currency sales price increases were more than offset by the impacts of generally weaker currencies relative to the US dollar, increased charges to restructuring and impairment and the favorable impact in 2014 of amendments to the defined benefit pension plans in the UK and the Netherlands.

Sales in 2015 were 11 percent lower, but 1 percent higher at constant exchange rates, with 2 percent lower sales volumes offset by 3 percent higher local currency sales prices, driven by increases to offset declines in emerging market currencies. The adverse impact on sales of generally weaker currencies relative to the US dollar was approximately \$1.8 billion. The lower sales volume reflected a deliberate reduction in sales of low margin glyphosate, weaker seeds volumes in Russia and the Ukraine after the sales price increases to offset the impact of currency weakness and generally challenging markets, partly offset by a favorable impact of a change in selling terms in Brazil that brought forward the recognition of sales and \$200 million royalty income from the signing of a trait license agreement with KWS and Limagrain. Despite the challenging conditions, ELATUS™ sales volumes increased by more than 30 percent, driven by growth in its second year in Brazil, and ACURON® sales exceeded \$100 million in the launch year in the US. Local currency sales price increases included price increases in Russia and the Ukraine, offsetting currency weakness in those countries, partially offset by lower prices in solo glyphosate, which reflected lower purchase prices for the active ingredient; otherwise, local currency sales prices overall were broadly flat.

Operating costs as a percentage of sales increased slightly in 2015 compared with 2014, but excluding restructuring and impairment were approximately 1.4 percentage points lower. Operating costs in 2015 were reduced by approximately \$1.2 billion due to weaker currency exchange rates relative to the US dollar, and also reflected savings under the ongoing restructuring programs and initial benefits from the lower oil price, which together more than offset cost inflation. In addition, operating costs compared with prior year were impacted by an increase in charges to provisions for doubtful receivables and the gains of approximately \$170 million recorded in 2014 from amendments to defined benefit pension plans in the UK and the Netherlands. Restructuring and impairment costs excluding those in Cost of goods sold were \$195 million higher as the Accelerating Operational Leverage (“AOL”) program announced in February 2014 gained momentum in 2015; increased charges also reflected advisor costs associated with potential industry consolidation transactions, including the unsolicited approach from Monsanto Company, the ChemChina tender offer, and the impairment of assets related to a seeds crop, where expectations of future operating profitability have declined. Currency exchange rate impacts from the general strength of the US dollar reduced operating income by approximately \$571 million, including higher gains on related hedges in 2015 than 2014, with a significant negative impact from the significantly weaker Russian ruble and Ukrainian hryvnia that was offset by increased local currency sales prices; excluding these currencies, the net adverse impact on operating income, including hedging, was approximately \$100 million.

Cash flow from operating activities was \$741 million lower including an increased build-up of trade receivables in Latin America due largely to delayed collections, reduced cash sales and extended terms combined with the aforementioned change in sales in Brazil, which brought forward the recognition of receivables; inflows from reduced inventories were also lower following the significant reduction in the inventory to sales ratio in 2014. Income before taxes, adjusted for the reversal of non-cash items was \$92 million higher than 2014, including a higher add-back for charges to provisions. Taxes paid were higher following the settlement of outstanding tax years for an entity in Switzerland, and cash paid for restructuring costs increased as the AOL program progressed. Cash flow used for investing activities in 2015 was \$267 million lower than in 2014, including a \$147 million reduction in additions to property, plant and equipment; net cash spent on acquisitions and disposals was also lower. Cash flow used for financing activities was \$768 million higher than in 2014; both years included bond repayments, but in 2015 bond repayments were broadly matched by a new bond issue, while in 2014 Eurobond and domestic CHF bonds were issued at a higher level than that of bonds repaid in the year. Subject to shareholder approval, Syngenta proposes to maintain the regular dividend at CHF 11.00 per share. In addition, if the offer to acquire Syngenta shares through a tender offer described in Note 30 to the consolidated financial statements in Item 18 becomes unconditional, Syngenta will pay a special dividend of CHF 5.00 per share immediately before the first settlement of the offer.

Integrated sales of Crop Protection and Seeds products were 12 percent lower, but were flat at constant exchange rates. Integrated sales included the \$200 million royalty income from the aforementioned license agreement with KWS and Limagrain and \$239 million additional sales related to the change in sales terms in Brazil, which brought forward the sales recognition to the point of delivery to distributors less a provision for expected product returns; however, sales were decreased by the deliberate reduction in volumes of lower margin glyphosate products and lower glyphosate local currency sales prices, which together reduced sales by approximately \$350 million. Crop Protection product sales were 12 percent lower, 1 percent at constant exchange rates, with 2 percent lower sales volumes partly offset by 1 percent higher local currency sales prices. Seeds sales declined in 2015 by 10 percent, but at constant exchange rates were 5 percent higher as an 8 percent increase in local currency sales prices, driven by local currency price increases in Russia and the Ukraine, was offset only partially by a 3 percent decrease in sales volume, including some adverse impact on sales volume from the aforementioned price increases.

Integrated sales of Crop Protection and Seeds products were 15 percent lower in Europe, Africa and Middle East, but were 10 percent higher at constant exchange rates. Sales in Russia and the Ukraine benefitted from significant local currency price increases to offset currency declines and in US dollar terms reached 86 percent of 2014 sales; excluding these countries, sales in the region were broadly flat at constant exchange rates but adversely impacted by an approximately 17 percent decline in the Euro relative to the US dollar. Sales in North America were 5 percent lower, 4 percent at constant exchange rates, with \$145 million income from the KWS and Limagrain license largely offset by the deliberate reduction in glyphosate volumes and lower glyphosate prices, together with the adverse impact on demand of low crop commodity prices. Latin America sales were 15 percent lower, 5 percent at constant exchange rates. Revenue in the region included \$55 million from the KWS and Limagrain agreement and an additional \$239 million from the change in sales terms noted above, but this was offset by difficult market conditions, particularly in the second half of the year, and challenging credit conditions in Brazil and Argentina; ELATUS™ sales, however, grew strongly in its second year in Brazil. Sales in Asia Pacific were 10 percent lower, 3 percent at constant exchange rates, with broad based local currency sales price increases more than offset by lower volumes from the phase-out of paraquat sales in China due to a regulatory change and drought conditions in ASEAN.

Lawn and Garden sales were 7 percent below the 2014 level, but were 3 percent higher at constant exchange rates with growth driven by the introduction of a new SDHI fungicide VELISTA™ in North America and increased vector control sales; flowers sales were lower following a focus on larger customers to improve profitability.

Gross profit margin increased by 1.6 percentage points, 1.5 percentage points excluding restructuring and impairment, despite the adverse impact of general currency exchange rate weakness relative to the US dollar. The favorable impact of the license agreement signed with KWS and Limagrain and restructuring savings, combined with reduced oil prices and smaller share in the product mix of lower margin solo glyphosate, more than offset the net impact of currency movements on US dollar sales prices and cost of goods sold.

Marketing and distribution expenses decreased by 11 percent, but were flat at constant exchange rates. Savings under ongoing restructuring programs, including headcount reductions in marketing and sales, offset an increase in charges for doubtful receivables in Latin America and inflation, particularly in emerging markets.

Research and development expense decreased by 5 percent, but was 3 percent higher at constant exchange rates, with cost savings from ongoing restructuring more than offset by the impact of the \$49 million gain reported in 2014 from the amendments to defined benefit pension plans in the UK and the Netherlands noted above.

General and administrative includes restructuring and impairment, the components of which are described under the Restructuring and impairment heading within this section, and which increased by \$195 million compared with 2014. General and administrative excluding restructuring and impairment was 21 percent lower, including foreign exchange hedging gains of \$21 million compared with \$15 million in 2014. Excluding currency effects, General and administrative excluding restructuring and impairment was 3 percent lower; cost savings under ongoing restructuring programs, including both headcount reductions and the relocation of certain support activities to lower cost locations, more than offset the recognition of a \$22 million gain in 2014 from changes to the UK and Netherlands pension plans.

Restructuring and impairment expenses in 2015, excluding those reported in Cost of goods sold, increased by \$195 million over 2014. 2015 included \$240 million of costs from the AOL program announced in February 2014, compared with \$63 million in 2014, as the program gained momentum. Charges in 2015 also increased due to higher acquisition, divestment and related costs, including advisor costs associated with industry consolidation activities. Non-cash costs included the impairment of the assets of a seeds crop where expectations of future operating profitability have declined.

Financial expense, net was \$39 million higher than 2014 mainly due to increased exposures and hedging costs in emerging markets, particularly in Latin America. The tax rate, excluding taxes related to restructuring and impairment, increased by 2 percentage points to 17 percent.

Together, these factors resulted in 2015 net income attributable to Syngenta AG shareholders and diluted earnings per share decreasing by 17 percent, compared with 2014.

In 2015, following the removal of the cap on the Swiss franc value relative to the Euro, Syngenta refined the method it uses to measure inventories and cost of goods sold to refer to the original exchange currencies in which inventory and cost of goods sold were incurred. This refinement ensures that inventories sourced with the same cost profile and which are at the same stage of manufacture are valued consistently regardless of which Syngenta entity purchases and holds them. Prior to 2015, the method used involved indirect translation into US dollars via the currencies of the Syngenta entities through which the products were routed in Syngenta's supply chain. Applying the new method, Syngenta reported 2015 net income \$73 million higher than it would have reported under the previous method. The impact of applying the new method on 2014 and 2013, before the removal of the Swiss franc cap, would not have been material to the results of either year. Syngenta regards the new method as better reflecting the underlying economics from year-to-year and not in itself a factor in the change in net income between 2014 and 2015. The change in method is further described in Note 2 to the consolidated financial statements in item 18.

Net income in 2014 was 2 percent lower than in 2013 as higher sales volumes and local currency sales prices were offset by the effects of weaker emerging market currency exchange rates and emerging market cost inflation; the favorable impact of the amendment to the defined benefit pension plan in the UK was offset by higher staff incentive costs compared with the low level in 2013.

Sales in 2014 were 3 percent higher than in 2013, 5 percent higher at constant exchange rates, with 2 percent growth in sales volumes and an additional 3 percent from higher local currency sales prices. This growth was achieved despite the impact of deliberate reductions in sales volume of the low margin solo glyphosate product TOUCHDOWN[®], which reduced sales by approximately \$150 million. First year sales of the new fungicide ELATUS[™] in Brazil increased sales by over \$300 million. Local currency sales price increases were achieved in 2014 in both Crop Protection and Seeds products and in all regions.

Operating costs as a percentage of sales increased slightly in 2014 compared with 2013, but at constant exchange rates were approximately 0.5 percent lower. Costs in 2014 were net of gains of approximately \$170 million from amendments to defined benefit pension plans in the UK and the Netherlands; 2013 included a gain of \$41 million from a change to the Swiss pension fund and significantly lower staff incentive costs. Cost of goods sold in 2014 included approximately \$110 million higher fixed costs from lower capacity utilization largely in Crop Protection products; 2013 Cost of goods sold included approximately \$175 million higher costs largely due to the drought in the seed growing season in 2012, with a continued impact in 2014 of approximately \$100 million, and approximately \$170 million of additional inventory provisions largely related to corn seed production in the United States in 2013. The charge to seeds inventory provisions in 2014 returned to more normal levels. Research and development costs were 4 percent higher than 2013, 5 percent at constant exchange rates. Research and development costs as a percentage of sales were broadly in line with 2013 at 9.4 percent and except for the 2014 defined benefit pension gain impact would have been towards the upper end of the medium-term target of 9-10 percent of sales forecast in the 2013 report. Restructuring and impairment costs excluding those in Cost of goods sold were \$14 million higher as a result of the first year costs of the AOL program. Excluding restructuring and impairment, combined Marketing and distribution expense and General and administrative were 5 percent higher, 9 percent at constant exchange rates; costs in 2013 included the full benefit of the amendment to the Swiss pension plan and lower staff incentive costs, while the impacts of the 2014 pension plan amendments were included largely in Cost of goods sold and Research and development. Exchange rate impacts, particularly those from sales in emerging market currencies, reduced operating income by approximately \$170 million, including gains on related hedges in 2014 compared with small losses in 2013. Financial expense, net was \$17 million higher than 2013, mainly due to increased funding and hedging costs relating to emerging market operations and higher bank charges from government transaction taxes in Argentina. The tax rate, excluding taxes related to restructuring and impairment, remained flat at 15 percent.

Cash flow from operating activities increased \$717 million largely due to changes in net working capital, which decreased mainly as the result of a planned reduction in inventory levels compared with an increase in 2013. Cash flow used for investing activities in 2014 was \$43 million lower than in 2013, including lower additions to property, plant and equipment, and increased proceeds from disposals including the sale of a site in Turkey. Cash flow used for financing activities was \$694 million lower than in 2013; while both years included bond repayments, in 2014 both Eurobond and domestic CHF bonds were issued; the higher net funds inflow from these bond activities more than offset the increased dividend payment.

Acquisitions, divestments and other significant transactions

2015

On October 15, 2015, Syngenta acquired 100 percent of the shares of Land.db Enterprises Inc. in exchange for cash, including contingent consideration. The primary reason for the acquisition was to gain exclusive control of the AgriEdge Excelsior[®] farm management software program, which integrates products, services, risk management and technology for growers.

2014

In April 2014, Syngenta acquired 100 percent of the shares of Società Produttori Sementi S.p.A. ("PSB") in exchange for cash. PSB is one of Italy's oldest seed companies and a leader in durum wheat breeding and production. The primary reasons for the acquisition were to gain access to PSB's durum wheat breeding expertise and its links to the food industry, which will be complemented by Syngenta's cereals Research and Development and global presence.

In July 2014, Syngenta acquired the German and Polish winter wheat and winter oilseed rape ("WOSR") breeding and business operations of Lantmännen, the Swedish food, energy and agriculture group, in exchange for cash. The acquired business consists of 100% of the shares of Lantmännen SW Seed Hadmersleben GmbH, Lantmännen SW Seed GmbH, SW Winter Oilseed AB and certain sites in Germany. The primary reasons for the acquisition were to give Syngenta access to high-quality germplasm, a seeds pipeline and commercial varieties which complement Syngenta's portfolio and will support the continued development of hybrid cereals for growers worldwide.

2013

In January and March 2013, Syngenta acquired the remaining equity interests in deVGen N.V. ("Devgen") that it did not already own after its initial takeover offer was settled in December 2012.

In October 2013, Syngenta acquired 100 percent of the shares of MRI Seed Zambia Ltd. ("MRI Seed") and MRI Agro Zambia Ltd. ("MRI Agro") (collectively "MRI") for \$88 million in cash. MRI is a leading developer, producer and distributor of white corn seed in Zambia. Syngenta believes that the white corn market has high growth potential, and the crop is critical to Africa's future food security. MRI's corn germplasm is among Africa's most comprehensive and diverse, incorporating temperate, tropical and sub-tropical material. This unique portfolio will be developed to support expansion in high-growth East African markets and may be leveraged globally through Syngenta's elite breeding programs. MRI Agro also distributes crop protection chemicals and other agricultural inputs in Zambia.

In December 2013, Syngenta divested its Dulcinea Farms business ("Dulcinea") to Pacific Trellis Fruit LLC, a US-based international grower and marketer of fresh produce.

Restructuring programs

In February 2014, Syngenta announced a restructuring program, the Accelerating Operational Leverage ("AOL") program to drive further improvement in operating income margins and accelerate delivery of operational leverage as sales grow. The program targets an improvement in profitability as a percentage of sales over the period up to 2018 from a reduction in the ratios of cost of goods sold, marketing and distribution, research and development and general and administrative expenses to sales. The program includes plans to further improve efficiency in customer facing operations, research and development and production and to enable an improvement in the ratio of trade working capital to sales. The cash cost of the restructuring program is estimated at approximately \$900 million, including the costs of implementing new systems, but excluding related capital expenditures, and significant benefits began to be realized in 2015. During 2015, cash costs of \$228 million were charged under the program and cash spent was \$168 million. A pension curtailment gain of \$21 million was recognized in relation to employees impacted by restructuring and non-cash charges of \$33 million were incurred for impairments of assets whose values were reduced by programs improving production and supply efficiency. Cumulative costs incurred for the program through December 31, 2015 total \$277 million and cumulative spending totals \$211 million.

The program announced in 2011 to integrate global commercial operations for Crop Protection and Seeds is substantially complete. The program has enabled operational synergies from the commercial integration, additional cost savings from procurement and supply chain efficiencies and the presentation of an integrated product offer to grower customers. It is estimated that final cash costs of approximately \$400 million will be incurred to complete the program. During 2015, costs of \$27 million were charged under the program (2014: \$61 million) and cash spent was \$29 million (2014: \$61 million). Cumulative costs incurred for the program through December 31, 2015 total \$399 million and cumulative spending totals \$375 million.

The operational efficiency cost saving programs announced in 2004 and 2007 are now complete. Cash spent under the programs in 2015 and 2014 totaled \$7 million and \$26 million, respectively, and minor cash outflows are expected during 2016. Cumulative spending on the programs to the end of 2015 totaled \$1,060 million and non-cash charges totaled \$371 million, broadly in line with the projected \$1,050 million cash costs and \$380 million of non-cash charges indicated in the 2014 report.

Results of operations

2015 compared with 2014

Sales commentary

Syngenta's consolidated sales for 2015 were \$13,411 million, compared with \$15,134 million in 2014, an 11 percent decrease year on year. At constant exchange rates sales grew by 1 percent. The analysis by segment is as follows:

(\$m, except change %)								Change
Segment	2015	2014	Volume %	Local price %	CER %	Currency %		Actual %
Europe, Africa and Middle East	3,884	4,547	-2%	12%	10%	-25%		-15%
North America	3,410	3,582	-1%	-3%	-4%	-1%		-5%
Latin America	3,632	4,279	-1%	-4%	-5%	-10%		-15%
Asia Pacific	1,837	2,033	-7%	4%	-3%	-7%		-10%
Total integrated	12,763	14,441	-2%	2%	-	-12%		-12%
Lawn and Garden	648	693	2%	1%	3%	-10%		-7%
Group sales	13,411	15,134	-2%	3%	1%	-12%		-11%

Europe, Africa and Middle East

Sales decreased by 15 percent, but increased by 10 percent at constant exchange rates as sales price increases of 12 percent partially were offset by 2 percent lower volumes. The price increases were largely realized in the CIS and substantially offset the significant currency depreciation in those countries. The adverse impact on sales volume of crop protection products from dry weather conditions, low crop disease pressure and depressed cereals prices was offset by strong performance in Fungicides, particularly the cereal fungicides SEGURIS[®] and MODDUS[®], as well as Seedcare. This offset the reduction of seeds volumes in the region, particularly in the CIS as a result of the aforementioned price increases. However, seeds volumes in the CIS grew significantly in the fourth quarter as the result of a successful campaign for corn and sunflower seeds.

North America

Sales decreased by 5 percent, 4 percent at constant exchange rates as sales prices decreased by 3 percent and volumes were 1 percent lower. A planned reduction in sales of glyphosate and lower glyphosate sales prices reduced integrated sales by 4 percent. In the USA, ongoing low crop commodity prices negatively affected the demand for crop enhancement applications. In Canada, sales were lower due to dry weather conditions and high channel inventories of Seedcare products at the start of the year. Sales in the fourth quarter increased significantly, helped by trait revenues of \$145 million from the licensing agreement with KWS and Limagrain announced in October and volume growth driven by ACURON[®], a newly launched herbicide.

Latin America

Sales decreased by 15 percent, 5 percent at constant exchange rates as sales prices decreased by 4 percent and volumes were 1 percent lower. Market conditions deteriorated in the second half of the year, with the sharp depreciation of the Brazilian real as well as tight credit conditions for growers in both Brazil and Argentina. The deliberate reduction in glyphosate volumes, together with lower local currency sales prices, reduced sales by \$224 million. Higher sales of ELATUS[™], now in its second year in Brazil, partially offset the impact of lower sales of Insecticides. In 2015, Syngenta implemented a change in contractual sales terms for crop protection products in Brazil, which caused a timing change in sales recognition and increased reported sales by \$239 million. In addition, 2015 seeds sales in the region included \$55 million in trait revenue from the KWS and Limagrain agreement.

Asia Pacific

Sales decreased by 10 percent, 3 percent at constant exchange rates as volumes decreased by 7 percent and sales prices were 4 percent higher. Sales volumes decreased in ASEAN, which experienced extended drought conditions, and China, where sales of paraquat were phased out due to a regulatory change. These decreases partially were offset by higher volumes in Australasia and where increased cotton acreage drove higher Seedcare sales. Sales price increases were achieved across most territories in the region, most notably in South Asia and with higher seed prices in ASEAN reflecting the increased adoption of genetically modified seed technology.

Lawn and Garden: major brands ICON[®], GOLDFISCH[®], GOLDSMITH SEEDS, YODER[®], SYNGENTA FLOWERS

Sales decreased by 7 percent, but increased by 3 percent at constant exchange rates as volumes increased by 2 percent and sales prices were increased by 1 percent. Volume growth was driven by the introduction of the new SDHI fungicide VELISTA™ in North America and higher vector control sales in Africa and the Middle East. Sales volumes in Flowers were lower as a consequence of a new strategy focusing on larger customers in order to improve profitability.

Sales by product line are set out below:

(\$m, except change %)	2015	2014	Change				Actual %
			Volume %	Local price %	CER %	Currency %	
Product line							
Selective herbicides	2,894	3,083	2%	4%	6%	-12%	-6%
Non-selective herbicides	913	1,445	-21%	-10%	-31%	-6%	-37%
Fungicides	3,357	3,518	6%	3%	9%	-14%	-5%
Insecticides	1,705	2,066	-7%	-1%	-8%	-9%	-17%
Seedcare	994	1,115	-1%	1%	–	-11%	-11%
Other crop protection	142	154	-10%	9%	-1%	-7%	-8%
Total Crop Protection	10,005	11,381	-2%	1%	-1%	-11%	-12%
Corn and soybean	1,564	1,665	1%	3%	4%	-10%	-6%
Diverse field crops	658	827	-13%	21%	8%	-28%	-20%
Vegetables	616	663	-2%	7%	5%	-12%	-7%
Total Seeds	2,838	3,155	-3%	8%	5%	-15%	-10%
Elimination*	(80)	(95)	n/a	n/a	n/a	n/a	n/a
Total integrated	12,763	14,441	-2%	2%	–	-12%	-12%
Lawn and Garden	648	693	2%	1%	3%	-10%	-7%
Group sales	13,411	15,134	-2%	3%	1%	-12%	-11%

* Crop Protection sales to Seeds

Crop Protection

Selective herbicides: major brands ACURON[®], AXIAL[®], CALLISTO[®] family, DUAL MAGNUM[®], BICEP II MAGNUM[®], FUSILADE[®]MAX, FLEX[®], TOPIK[®]

Sales decreased by 6 percent, but increased by 6 percent at constant exchange rates as local currency sales prices were increased by 4 percent and volumes grew by 2 percent. The price increase was substantially in the CIS, where it compensated for currency depreciation. Sales volume growth was led by sales in the US of ACURON[®], which achieved its target of \$100 million sales in its launch year. This combined with higher sales in Latin America from the change in sales terms in Brazil more than offset decreased volumes elsewhere, particularly in Canada due to dry weather conditions.

Non-selective herbicides: major brands GRAMOXONE[®], TOUCHDOWN[®]

Sales decreased by 37 percent, 31 percent at constant exchange rates as volumes decreased by 21 percent and local currency sales prices decreased by 10 percent. The sales decline reflects the decision by Syngenta to reduce volumes of low gross profit margin solo glyphosate in order to improve overall profitability. Volumes were also impacted by the phase out of sales in China of GRAMOXONE[®] following a regulatory change affecting paraquat liquid formulations. The sales price decrease was due to the lower price of TOUCHDOWN[®] and reflected a lower purchase price for the active ingredient.

Fungicides: major brands ALTO[®], AMISTAR[®], BONTIMA[™], BRAVO[®], ELATUS[™], MODDUS[®], REVUS[®], RIDOMIL GOLD[®], SCORE[®], SEGURIS[®], TILT[®], UNIX[®]

Sales decreased by 5 percent, but increased by 9 percent at constant exchange rates as volumes grew by 6 percent and local currency sales prices were increased by 3 percent. Sales volume growth was achieved in all regions except Asia Pacific, where dry weather conditions reduced demand. Growth in Latin America included strong second-year sales of ELATUS[™], which exceeded \$400 million. Sales volume also grew widely in Europe, led by strong sales of the cereals fungicides ALTO[®], MODDUS[®] and SEGURIS[®]. Sales price increases in Latin America, Asia Pacific and Europe, which were driven by price rises in the CIS to offset currency weakness, more than offset lower prices in North America.

Insecticides: major brands ACTARA[®], DURIVO[®], FORCE[®], KARATE[®], PROCLAIM[®], VERTIMEC[®]

Sales decreased by 17 percent, 8 percent at constant exchange rates as volumes decreased by 7 percent and local currency sales prices decreased by 1 percent. Volume growth in Asia Pacific from new product introductions in China and India was more than offset by a reduction in Latin America, caused by dry weather and low insect pressure in Argentina and high channel inventories in Brazil, though with higher ACTARA[®] sales in the fourth quarter from an improvement in the sugarcane market. Sales price increases in Europe, mainly in the CIS, and in Asia Pacific were offset by declines particularly in Latin America.

Seedcare: major brands AVICTA[®], CRUISER[®], DIVIDEND[®], CELEST[®]/MAXIM[®], VIBRANCE[®]

Sales decreased by 11 percent and were unchanged at constant exchange rates as a 1 percent local currency sales price increase was offset by a 1 percent volume decrease. Sales price increases in Europe, mainly in the CIS to offset currency weakness, more than offset lower prices in North America and Latin America. Sales volumes in Europe were strong in the cereals markets in the CIS and Central Europe, and in Asia Pacific sales benefitted from a focus on key accounts and broad based growth in Australasia. This largely offset lower volumes in North America, caused by high channel inventories in the Canadian cereals market and lower cotton acres in southern US states.

Seeds

Corn and soybean: major brands AGRISURE[®], GOLDEN HARVEST[®], NK[®]

Sales decreased by 6 percent, but increased by 4 percent at constant exchange rates as local currency sales prices were increased by 3 percent and volumes grew by 1 percent. Corn sales volumes increased due to a combined \$200 million recognized in North America and Latin America in the fourth quarter from the licensing agreement with KWS and Limagrain. This was partially offset by lower branded product sales in the US, caused by the acreage shift from corn to soybean, and lower corn volumes in Europe due to reduced acreage. Soybean volumes in Latin America decreased as sales were shifted to distributors as part of the implementation of the Integrated Business Partner model in Brazil. Corn prices were increased significantly in the CIS and also increased in Asia Pacific, driven by increased adoption of genetically modified seed technology there.

Diverse field crops: major brands NK[®] oilseeds, HILLESHÖG[®] sugar beet

Sales decreased by 20 percent, but increased by 8 percent at constant exchange rates as local currency sales prices were increased by 21 percent and volumes decreased by 13 percent. The strong price growth was due to substantial price increases on sunflower in the CIS, which fully offset the impact of currency depreciation, though with some adverse impact on sales volume as some growers switched from high value hybrids to lower quality local seeds. Sugar beet volumes were lower due to oversupply in the sugar market, which led to significant acreage shifts in Europe.

Vegetables: major brands ROGERS[®], S&G[®]

Sales decreased by 7 percent, but increased by 5 percent at constant exchange rates as local currency sales prices were increased by 7 percent and volumes decreased by 2 percent. Sales prices were increased in all regions with a focus on capturing value for high quality hybrids across the portfolio and in particular in Asia Pacific where Syngenta captured a share of the strong return on investments being achieved by growers in South Asia. Sweetcorn sales in the USA decreased due to high processor inventories.

Operating income

Variances in the tables below reflect the profit impact of changes year on year. For example, an increase in sales or a decrease in costs is a positive variance and a decrease in sales or increase in costs is a negative variance.

Group Operating Income (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2015	2014	2015	2014	2015	2014	Actual%	CER %
Sales	13,411	15,134	–	–	13,411	15,134	-11%	1%
Cost of goods sold	(7,042)	(8,192)	–	(13)	(7,042)	(8,179)	14%	5%
Gross profit	6,369	6,942	–	(13)	6,369	6,955	-8%	7%
as a percentage of sales	48%	46%	–	–	48%	46%		
Marketing and distribution	(2,210)	(2,497)	–	–	(2,210)	(2,497)	11%	–
Research and development	(1,362)	(1,430)	–	–	(1,362)	(1,430)	5%	-3%
General and administrative	(956)	(910)	(388)	(193)	(568)	(717)	21%	3%
Operating income	1,841	2,105	(388)	(206)	2,229	2,311	-4%	21%
as a percentage of sales	14%	14%			17%	15%		

Operating Income/(Loss) (\$m, except change %)	2015	2014	Change%
Europe, Africa and Middle East	1,155	1,456	-21%
North America	973	901	8%
Latin America	890	1,069	-17%
Asia Pacific	484	560	-14%
Non-regional	(1,781)	(1,981)	10%
Total integrated	1,721	2,005	-14%
Lawn and Garden	120	100	20%
Group	1,841	2,105	-13%

The two tables above do not represent income statements prepared under IFRS. Please refer to the information reported in the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Overall Group operating income

Operating income decreased by 13 percent to \$1,841 million as the adverse impact of generally weaker currencies versus the US dollar and increased charges to Restructuring more than offset cost savings and local currency sales price increases. Overall, weaker currencies reduced operating income by approximately \$571 million, including a significant adverse impact from the Russian ruble and Ukrainian hryvnia. The ruble and hryvnia currency impact was substantially offset by local currency sales price increases in Russia and the Ukraine. Excluding these currencies, the adverse impact on operating income of exchange rate movements, including the net hedging result from the hedging program for forecast foreign currency transactions ("EBITDA hedging program"), is estimated at approximately \$100 million. The ratio of operating income to sales was broadly flat, but improved by approximately 1.4 percentage points excluding restructuring and impairment.

Sales declined by 11 percent, but were 1 percent higher at constant exchange rates with sales volumes 2 percent lower with the deliberate reduction in sales of solo glyphosate and challenging market conditions in all regions more than offsetting license income received from KWS and Limagrain and the impact of the change in selling terms in Brazil. Overall local currency sales prices were 3 percent higher, driven by price increases in Russia and the Ukraine to substantially maintain equivalent US dollar price levels and after absorbing lower prices for solo glyphosate; prices otherwise were broadly flat. Exchange rate movements reduced sales by \$1.8 billion, or 12 percent. Gross profit margin increased by 1.6 percentage points, 1.5 percentage points excluding restructuring and impairment. The favorable impact of the license agreement signed with KWS and Limagrain and restructuring savings, combined with reduced oil prices and the smaller share in the product mix of lower margin solo glyphosate, more than offset lower US dollar sales prices and the inclusion in 2014 of gains from the amendments to defined benefit pension plans in the UK and the Netherlands.

Marketing and distribution costs were 11 percent lower, but remained flat at constant exchange rates, with emerging market cost inflation and an increase to charges for doubtful receivables, particularly in Brazil, more than offsetting marketing and distribution cost savings from restructuring activities. Research and development expense decreased by 5 percent, but was 3 percent higher at constant exchange rates, with cost savings from ongoing restructuring more than offset by the impact of the \$49 million gain reported in 2014 from the amendments to defined benefit pension plans in the UK and the Netherlands noted above. Research and development expense increased to 10.2 percent of sales, compared with 9.4 percent in 2014, also due to the different currency mix in Research and development costs compared with that of sales.

General and administrative including restructuring and impairment was 5 percent higher than 2014, but 21 percent lower excluding restructuring and impairment. General and administrative is reported net of the result of currency hedging programs, which in 2015 was a net income of \$21 million compared with a net income of \$15 million in 2014. At constant exchange rates, taking into account both variances in underlying costs and the change in the net hedging result from year to year, General and administrative excluding restructuring and impairment was 3 percent lower than 2014. General and administrative costs in global support functions, including Business Services, are charged out to the segments and to the global Research and development and Production and Supply operations in US dollars at amounts fixed at the start of the year and are then reported in Cost of goods sold, Research and development expense and Marketing, sales and distribution expense; as a result, the impact of currency movements on reported General and administrative is calculated based on the gross expenditure before these recharges. Lower costs in 2015 at constant exchange rates reflected savings under the ongoing restructuring programs, including headcount reductions and the transfer of support function roles to lower cost countries, as well as tight constraint of variable costs; increased gains on the disposal of non-current assets in 2015 offset the \$22 million recorded gain on changes to the UK and Netherlands pension plans in 2014. Restructuring and impairment, including the portion recorded in Cost of goods sold, is described in Note 6 to the consolidated financial statements in Item 18 and increased by \$182 million in 2015 to \$388 million due to the progression of the AOL restructuring program and advisory costs related to proposed industry consolidation corporate transactions.

Operating income by segment

Europe, Africa and Middle East (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2015	2014	2015	2014	2015	2014	Actual%	CER%
Sales	3,884	4,547	–	–	3,884	4,547	-15%	10%
Cost of goods sold	(1,889)	(2,180)	–	(13)	(1,889)	(2,167)	13%	2%
Gross profit	1,995	2,367	–	(13)	1,995	2,380	-16%	21%
as a percentage of sales	51%	52%			51%	52%		
Marketing and distribution	(586)	(720)	–	–	(586)	(720)	19%	4%
General and administrative	(254)	(191)	(128)	(30)	(126)	(161)	22%	17%
Operating income	1,155	1,456	(128)	(43)	1,283	1,499	-14%	37%
as a percentage of sales	30%	32%			33%	33%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

1 Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales in Europe, Africa and Middle East were 15 percent below 2014, but had been reduced by approximately 25 percent due to weaker exchange rates relative to the US dollar, including the Euro, Russian ruble and Ukrainian hryvnia. At constant exchange rates, sales were 10 percent above 2014, with local currency price increases of 12 percent, principally in the CIS to compensate the currency weakness, offset by 2 percent lower sales volumes. See the Sales commentary section above for further information on sales in the region.

Gross profit margin was 0.7 percentage points lower and, excluding restructuring and impairment was also 0.7 percentage points lower. Local currency price increases in Russia and the Ukraine offset the adverse impact of exchange rate weakness and enabled gross profit to be largely maintained. The portion of Restructuring and impairment in 2014 that is included in Cost of goods sold related to the acquisitions completed in the year.

Marketing and distribution costs were 19 percent lower, 4 percent at constant exchange rates, with lower charges for doubtful receivables following strong customer collections in Eastern Europe and cost savings realized under the AOL restructuring program.

General and administrative was 33 percent higher including increased restructuring charges. Excluding restructuring and impairment, General and administrative was 22 percent lower, 17 percent at constant exchange rates due to the inclusion in 2015 of the gain on disposal of land from a site in Switzerland. Restructuring and impairment charges reported within General and administrative were \$128 million in 2015 compared with \$30 million in 2014. Charges in 2015 include \$107 million related to progressing the AOL restructuring program, including restructuring the marketing organization and the relocation of certain support activities to lower cost countries, and \$7 million for the integration of acquisitions completed in previous years. Charges in 2014 include first year costs of the AOL program in the region.

Operating income as a percentage of sales was 2 percentage points lower in 2015, but excluding restructuring and impairment was broadly flat at 33 percent, with the lower Marketing and distribution and General and administrative expenses offsetting the reduced gross profit margin.

North America (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2015	2014	2015	2014	2015	2014	Actual%	CER%
Sales	3,410	3,582	–	–	3,410	3,582	-5%	-4%
Cost of goods sold	(1,779)	(2,003)	–	–	(1,779)	(2,003)	11%	9%
Gross profit	1,631	1,579	–	–	1,631	1,579	3%	3%
as a percentage of sales	48%	44%			48%	44%		
Marketing and distribution	(537)	(564)	–	–	(537)	(564)	5%	3%
General and administrative	(121)	(114)	(37)	(22)	(84)	(92)	9%	8%
Operating income	973	901	(37)	(22)	1,010	923	9%	8%
as a percentage of sales	29%	25%			30%	26%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales decreased by 5 percent, 4 percent at constant exchange rates, with sales volumes 1 percent lower and 3 percent lower local currency sales prices. See the Sales commentary section above for further information on sales in the region. Sales included \$145 million from the license agreement with KWS and Limagrain, which increased the gross profit margin by approximately 2.3 percentage points; excluding this, gross profit margin was approximately 1.5 percentage points higher in 2015, 1 percentage point at constant exchange rates, partly due to the impact of lower volumes of lower margin solo glyphosate sales in 2015.

Marketing and distribution costs were 5 percent lower, 3 percent at constant exchange rates, with savings from restructuring within both the marketing and distribution functions.

General and administrative excluding restructuring and impairment was 9 percent below 2014, 8 percent at constant exchange rates, due partially to a settlement gain relating to the US defined benefit pension plan and the realization of insurance proceeds relating to claims made in prior years, where recovery had not previously been assumed.

Restructuring and impairment costs were \$15 million higher than 2014 and in 2015 included \$23 million under the AOL program, including a minor impairment related to the closure of a seeds plant in the US. 2015 charges also included \$7 million of impairment of exclusive distribution rights where an agreement was terminated. Charges in 2014 included \$12 million for initiatives under the AOL program, cash costs for the closure of activities that had not been divested with the Dulcinea business and final charges under previous restructuring programs.

Operating income as a percentage of sales increased by 4 percentage points as a result of the higher gross profit margin, including the favorable impact of the \$145 million license income from the agreement with KWS and Limagrain.

Latin America (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2015	2014	2015	2014	2015	2014	Actual%	CER%
Sales	3,632	4,279	–	–	3,632	4,279	-15%	-5%
Cost of goods sold	(2,118)	(2,492)	–	–	(2,118)	(2,492)	15%	5%
Gross profit	1,514	1,787	–	–	1,514	1,787	-15%	-4%
as a percentage of sales	42%	42%			42%	42%		
Marketing and distribution	(557)	(615)	–	–	(557)	(615)	9%	-13%
General and administrative	(67)	(103)	(28)	(26)	(39)	(77)	50%	–
Operating income	890	1,069	(28)	(26)	918	1,095	-16%	-15%
as a percentage of sales	25%	25%			25%	26%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales decreased by 15 percent, 5 percent at constant exchange rates with 1 percent lower sales volumes and 4 percent lower local currency sales prices. See the Sales commentary section above for further information on sales in the region. Gross profit margin was stable at 42 percent, approximately 0.4 percentage points lower at constant exchange rates. The favorable mix impact of reduced sales volume of lower margin glyphosate, lower glyphosate active ingredient purchase costs and an improved gross profit margin on seeds products from the new soybean operating model combined to offset the adverse impact of lower sales prices.

Marketing and distribution costs were 9 percent lower than 2014, but were 13 percent higher at constant exchange rates, with relatively high local cost inflation rates, particularly in Argentina, and higher charges to provisions for doubtful receivables due to weaker macroeconomic and liquidity conditions, particularly in Brazil; these more than offset the full year benefit in 2015 of the reduction of the commercial organisation in Argentina that occurred in 2014.

General and administrative excluding restructuring and impairment was approximately 50 percent lower than 2014, but broadly flat at constant exchange rates, with costs savings in support functions offset by an increase in litigation costs. General and administrative in 2015 was net of currency hedging gains of \$31 million, compared with losses of \$6 million in 2014.

Restructuring and impairment costs increased by \$2 million to \$28 million in 2015. The 2015 amount includes \$22 million related to the AOL restructuring program, including restructuring of marketing operations and initial costs to establish an integrated system and support platform in Brazil. Charges in 2014 included non-cash impairments of \$14 million for the write-down of machinery in Brazil due to significant changes in production processes and \$9 million for initiatives to drive efficiencies in local commercial operations under the AOL program.

Operating income was \$179 million lower, \$177 million excluding restructuring and impairment, due to the reduced sales and increased charges for doubtful receivables. Operating income as a percentage of sales declined by 0.5 percentage points. Excluding restructuring and impairment, operating income as a percentage of sales declined by 0.3 percentage points and by 2.6 percentage points at constant exchange rates due to increased Marketing and distribution costs, including the higher charges for doubtful receivables.

Asia Pacific (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2015	2014	2015	2014	2015	2014	Actual %	CER%
Sales	1,837	2,033	–	–	1,837	2,033	-10%	-3%
Cost of goods sold	(1,012)	(1,107)	–	–	(1,012)	(1,107)	9%	4%
Gross profit	825	926	–	–	825	926	-11%	-3%
as a percentage of sales	45%	46%			45%	46%		
Marketing and distribution	(286)	(314)	–	–	(286)	(314)	9%	4%
General and administrative	(55)	(52)	(20)	(4)	(35)	(48)	27%	26%
Operating income	484	560	(20)	(4)	504	564	-11%	–
as a percentage of sales	26%	28%			28%	28%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales were 10 percent lower, but only 3 percent lower at constant exchange rates, with 7 percent lower sales volumes and 4 percent higher local currency sales prices. See the Sales commentary section above for further information regarding sales in the region. Gross profit margin declined by 0.6 percentage points, but was flat at constant exchange rates, with higher local currency sales prices and reduced sales of lower margin paraquat offset by adverse country mix within the region.

Marketing and distribution costs were 9 percent lower, 4 percent at constant exchange rates, with savings from restructuring in the marketing function.

General and administrative excluding restructuring and impairment decreased by \$13 million, approximately \$12 million at constant exchange rates, with tight cost constraints on support functions, minor increases in government grants and gains from an intangible asset disposal.

Restructuring and impairment charges in 2015 increased by \$16 million to \$20 million. Charges in 2015 included \$16 million for implementation of AOL programs and \$3 million final charges under a previous restructuring program.

Operating income margin decreased by 2 percentage points to 26 percent, but excluding restructuring and impairment remained flat at 28 percent.

Non-regional

Income and expense transactions in the integrated business have been attributed to the geographic regions based on the market destination to which they relate, rather than on the region in which they originated. Some costs of the integrated organization do not relate to a geographic destination and are reported as non-regional. These include global marketing teams, research and development and corporate headquarter functions. In addition, regional gross profit performance is based on standard product costs, with variances from the standard reported as non-regional in order to align the reported results with organizational responsibility. Non-regional also includes results of centrally managed currency and commodity hedging programs.

Non-regional costs decreased by \$200 million, or 10 percent from 2014, to \$1,781 million largely due to a decrease in Cost of goods sold of \$146 million reflecting more favorable production cost variances in the production of Crop Protection products. The favorable production cost variances are due to both weaker currency exchange rates in purchasing and manufacturing costs and lower purchase prices, including those linked to the price of oil. Research and development expense was 5 percent lower, but was 3 percent higher at constant exchange rates as cost savings from ongoing restructuring were offset by the \$49 million of gains from pension plan amendments in the UK and Netherlands recorded in 2014. Global marketing expense decreased by \$27 million due to the restructuring and reorganization of the global marketing teams. General and administrative is reported including currency hedging losses of \$30 million compared with gains of \$13 million in 2014. Excluding restructuring and impairment, General and administrative decreased by \$33 million to \$274 million. At constant exchange rates, these costs were approximately \$30 million higher, with cost savings from the AOL restructuring program more than offset by the \$22 million gain recorded in 2014 from the amendments to the UK and Netherlands pension plans and lower gains in 2015 on tangible asset disposals. Restructuring and impairment charges reported within Non-regional increased by \$72 million to \$168 million. Charges in 2015 included \$66 million related to the AOL program, including impairments at two manufacturing sites, a further impairment related to a seeds crop where expectations of future profitability have reduced and approximately \$77 million of acquisition, divestment and related costs, including advisory costs associated with possible corporate transactions. Details of restructuring and impairment for 2015 and 2014 are shown further below.

Lawn and Garden (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2015	2014	2015	2014	2015	2014	Actual %	CER %
Sales	648	693	–	–	648	693	-7%	3%
Cost of goods sold	(298)	(318)	–	–	(298)	(318)	6%	-1%
Gross profit	350	375	–	–	350	375	-7%	4%
as a percentage of sales	54%	54%			54%	54%		
Marketing and distribution	(161)	(174)	–	–	(161)	(174)	8%	–
Research and development	(52)	(54)	–	–	(52)	(54)	3%	-1%
General and administrative	(17)	(47)	(7)	(15)	(10)	(32)	69%	-1%
Operating income	120	100	(7)	(15)	127	115	10%	14%
as a percentage of sales	19%	14%			20%	17%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Lawn and Garden sales were 7 percent lower, but were 3 percent higher at constant exchange rates, with a 1 percent increase in local currency sales prices and a 2 percent increase in sales volumes. See the Sales commentary section above for further information on sales in the segment. Gross profit margin decreased by 0.1 percentage points but increased by 0.8 percentage points at constant exchange rates from increased volumes of higher margin Turf & Landscape products.

Marketing and distribution costs were 8 percent lower, but were flat at constant exchange rates. Research and development expense was 3 percent lower, 1 percent higher at constant exchange rates, with restructuring activities at the Netherlands site having started in the final quarter of the year. General and administrative is reported net of a \$24 million currency hedging gain under the EBITDA hedging program compared with \$8 million in 2014. General and administrative excluding restructuring and impairment was 69 percent lower than 2014 including the hedging gains and at constant exchange rates was 1 percent higher.

Restructuring costs in 2015 decreased by \$8 million compared with 2014 and in 2015 related largely to the AOL program. Restructuring costs in 2014 were due to continuing restructuring of the Flowers business, including initiatives to improve efficiency as part of the AOL program.

Operating income as a percentage of sales increased by approximately 5 percentage points to 19 percent. Excluding restructuring and impairment, operating income as a percentage of sales increased by approximately 3 percentage points to 20 percent, 16 percent excluding the hedging gain; at constant exchange rates, operating income as a percentage of sales increased by approximately 1.8 percentage points.

Defined Benefit Pensions

Defined benefit pension expense was a charge of \$165 million in 2015 compared with a credit of \$36 million in 2014. After adjusting for the non-recurrence in 2015 of \$175 million of one-time gains in 2014 from plan amendments and settlements in the UK and Netherlands, pension expense increased by \$26 million, mainly due to a reduction in the discount rate used to measure expense for the Swiss pension plan, from 2.25 percent in 2014 to 1.25 percent in 2015, and to \$11 million of early retirement costs incurred in implementing the AOL program, partly offset by first year savings from the UK plan amendment and the reporting of Netherlands benefit expense as defined contribution rather than defined benefit. Syngenta expects 2016 defined benefit pension expense, excluding costs associated with restructuring, to be similar to 2015 expense at constant exchange rates, with the impact of a further reduction in the Swiss discount rate from 1.25 percent to 0.75 percent offset by savings from the restructuring actions undertaken in 2015.

Syngenta contributions to defined benefit pension plans were \$168 million in 2015 compared with \$185 million in 2014. The decrease is due to Syngenta having paid in 2014 a \$25 million additional lump sum contribution resulting from the 2013 Swiss plan amendment. No such additional contributions were made in 2015. In 2016, Syngenta expects contributions to defined benefit pension plans, excluding early retirement contributions associated with restructuring actions, to be approximately \$160 million.

Restructuring and impairment

Restructuring and impairment charges for the years ended December 31, 2015 and 2014, broken down into the main restructuring initiatives, consist of the following:

(\$m)	2015	2014
Accelerating operational leverage programs:		
Cash costs	228	49
Pension curtailment gain	(21)	–
Non-cash impairment costs	33	14
Integrated crop strategy programs:		
Cash costs	27	61
Operational efficiency programs:		
Cash costs	–	18
Acquisition, divestment and related costs:		
Cash costs	91	27
Non-cash items		
Reversal of inventory step-ups	–	13
Fixed asset impairment	1	–
Other non-cash restructuring and impairment:		
Non-current asset impairment	29	24
Total restructuring and impairment¹	388	206

¹ \$nil (2014: \$13 million) is included within Cost of goods sold and \$388 million (2014: \$193 million) as Restructuring within General and Administrative.

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the effects of analyzing and preparing for potential industry consolidation transactions as well as completing and integrating significant business combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded.

Impairment includes impairment losses associated with major restructuring as well as impairment losses and reversals of impairment losses resulting from major changes in the markets in which a reported segment operates.

The incidence of these business changes may be periodic and the effect on reported performance of initiating them will vary from period to period. Because each such business change is different in nature and scope, there will be little continuity in the detailed composition and size of the reported amounts which affect performance in successive periods. Separate disclosure of these amounts facilitates the understanding of performance including and excluding items affecting comparability. Syngenta's definition of restructuring and impairment may not be comparable to similarly titled line items in financial statements of other companies.

2015

Accelerating operational leverage programs

Cash costs of \$228 million, including \$127 million of severance and pension charges, consist of \$77 million for initiatives to restructure marketing and commercial operations, \$43 million for projects to drive efficiencies in territory commercial operations, \$48 million to rationalize logistical operations and optimize production capacity, \$36 million for Research and Development productivity projects, \$17 million for projects to increase the effectiveness of back office support services and \$7 million for project management. Non-cash impairment costs of \$33 million consist of tangible asset write-downs at three sites resulting from projects to rationalize logistical operations and optimize production capacity. The pension curtailment gain consists of the difference between the cash contributions payable on early retirements and the calculation of net pension curtailment costs according to IFRS, with regards to the Swiss defined benefit pension plan. Cash costs for early retirements are included in the cash costs of various projects described above.

Integrated crop strategy programs

Cash costs of \$27 million include \$20 million of charges for the transfer of certain system and process management activities to the internal service center in India, including \$11 million for information system projects, \$1 million to restructure the integrated Research and Development function, \$1 million to restructure the Human Resource organization and \$5 million of corporate headquarter and other costs.

Acquisition, divestment and related costs

Cash costs of \$91 million include \$8 million incurred to integrate previous acquisitions, mainly the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, PSB and MRI. A further \$83 million represents transaction charges, including costs related to potential industry consolidation transactions, such as the proposals received from Monsanto Company, as well as costs associated with the separation and planned divestment of the Flowers and Vegetables Seeds businesses announced during 2015; following an internal review, Syngenta decided in 2016 not to pursue the divestments. The impairment relates to fixed assets acquired with the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen.

Other non-cash restructuring

Other non-current asset impairment of \$29 million includes \$20 million to impair the assets of a seeds crop where expectations of future operating profitability have reduced, \$7 million of impairment of exclusive distribution rights where the distribution agreement has been terminated and \$2 million for two other intangible asset impairments.

2014

Accelerating operational leverage programs

In February 2014, Syngenta commenced the restructuring program to drive further improvements in operating income margins and accelerate delivery of operational leverage as sales grow. 2014 cash costs of \$49 million included \$14 million for initiatives to restructure marketing and commercial operations, \$13 million for projects to drive efficiencies in territory commercial operations, particularly in Latin America, \$11 million to rationalize logistical operations and optimize production capacity, \$5 million for Research and Development productivity projects, and \$6 million for project management. Non-cash charges consisted of \$1 million for the impairment of a site, which was closed, and \$13 million for inventory write-downs due to a significant rationalization of the Vegetables product range.

Integrated crop strategy programs

Cash costs of \$61 million included \$24 million of charges for the transfer of certain system and process management activities to a new internal service center in India, including severance and pension costs of \$11 million, \$25 million for the development and rollout of processes and training programs for marketing the integrated Crop Protection and Seeds product offers and related commercial reorganization, \$4 million for information system projects, \$4 million to restructure the integrated Research and Development function, \$2 million to restructure the Human Resource organization and \$2 million for legal entity rationalization projects.

Operational efficiency programs

The operational efficiency restructuring programs announced in 2004 and 2007 were substantially complete. The final expenditures of \$18 million in 2014 largely related to the rollout of standardized and outsourced human resource support services.

Acquisition, divestment and related costs

Cash costs of \$27 million included \$21 million incurred to integrate previous acquisitions, mainly Devgen, MRI, PSB, and the Polish and German winter wheat and oilseed rape breeding and business operations of Lantmännen. A further \$6 million consisted of transaction costs, including those related to uncompleted transactions. Reversal of inventory step-up related to the MRI and PSB acquisitions.

Other non-cash restructuring

Other non-cash restructuring consisted of \$20 million of fixed asset impairments, including \$14 million for plant and machinery in Brazil and Canada due to significant changes in production processes and \$6 million for development costs of major plant expansion projects that were subsequently aborted, and \$4 million for the impairment of loan notes related to strategic venture capital investments.

Financial expense, net

Financial expense, net increased to \$256 million in 2015 from \$217 million in 2014. Currency related financial expenses in 2015 of \$215 million were \$76 million higher than 2014 reflecting the higher cost of hedging in emerging markets and increased exposures in Latin American countries due to later receivable collections. Net interest expense of \$19 million in 2015 was \$24 million lower than in 2014 with lower levels of average gross debt in 2015 and more recent debt issuances at lower interest rates than the debt they replaced.

Taxes

Syngenta's effective tax rate in 2015 was 16 percent, 2 percent higher than the 14 percent effective tax rate for 2014. Syngenta's Swiss statutory tax rate was 22 percent in both years. Income taxed at different rates reduced the effective tax rate by 8 percent in 2015, compared with 4 percent in 2014, with a higher weighting of income subject to a lower tax rate, including in Switzerland where certain intellectual property income is subject to tax at a reduced rate; total income before taxes in Switzerland was 53 percent of group income before tax in 2015 compared with 33 percent in 2014. Tax deduction for amortization and impairments not recognized for IFRS reduced the tax rate by 2 percent (3 percent in 2014) due to the impairment of the shares held by several group companies in subsidiaries resulting from a decrease in the value of the subsidiaries as determined under local GAAP, due in part to weaker exchange rates of the functional currency of the subsidiaries. Changes in prior year estimates and other items increased the tax rate by 4 percent in 2015, compared with reducing the tax rate by 2 percent in 2014, due to a change in the tax treatment of certain costs in the US in 2015. Non-recognition of deferred tax assets increased the tax rate by 5 percent in 2015 (3 percent in 2014) mainly due to deferred tax assets in parts of Latin America where the criteria for recognizing deferred tax assets is not met because of local currency weakness and weak economic conditions; conversely an improvement in profitability in operations in Russia and the Ukraine contributed to a 2 percent reduction in the tax rate from recognition of previously unrecognized deferred tax assets (1 percent in 2014).

The tax rate on restructuring and impairment was 23 percent in 2015, compared with 18 percent for 2014 due to the different mix of gains and losses included in the net charge over the period and the varying tax treatments applied in different countries. Future rates applicable to restructuring and impairment will be dependent on the nature and size of the charges and may vary from year to year.

Net income for the period and other supplementary income data

Net income attributable to Syngenta shareholders in 2015 was \$1,339 million, 17 percent lower than the 2014 amount of \$1,619 million. Sales were 11 percent lower due to weaker foreign currency exchange rates relative to the US dollar. Operating costs excluding Restructuring and impairment as a percentage of sales were 1.4 percentage points lower, but including the higher level of Restructuring and impairment were 0.2 percentage points higher. Operating costs in 2014 were net of a \$175 million gain recognized on changes to the UK and Netherlands pension plans. These combined to reduce operating income by 13 percent from 2014. As a result of the higher financial expense, net, and the increase in the effective tax rate, net income was 17 percent below 2014.

After related taxation, restructuring and impairment charges in 2015 were \$300 million compared with \$168 million in 2014 largely due to increased charges related to the AOL restructuring program announced in 2014 and increased acquisition, divestment and related costs, including those for advisors supporting Syngenta in the ongoing industry consolidation review and activities.

Results of operations

2014 compared with 2013

Sales commentary

Syngenta's consolidated sales for 2014 were \$15,134 million, compared with \$14,688 million in 2013, a 3 percent increase year on year. At constant exchange rates sales grew by 5 percent. The analysis by segment is as follows:

(\$m, except change %) Segment	2014	2013	Change				Actual %
			Volume %	Local price %	CER %	Currency %	
Europe, Africa and Middle East	4,547	4,223	7%	4%	11%	-3%	8%
North America	3,582	3,848	-8%	2%	-6%	-1%	-7%
Latin America	4,279	3,991	7%	2%	9%	-2%	7%
Asia Pacific	2,033	1,935	4%	6%	10%	-5%	5%
Total integrated	14,441	13,997	3%	3%	6%	-3%	3%
Lawn and Garden	693	691	0%	1%	1%	-1%	0%
Group sales	15,134	14,688	2%	3%	5%	-2%	3%

Europe, Africa and Middle East

Sales increased by 8 percent, 11 percent at constant exchange rates as volume increased by 7 percent and local currency sales prices increased by 4 percent. Sales growth was broad-based, with increases in all territories. The CIS registered strong volume growth in both Crop Protection and Seeds, with a particularly strong fourth quarter. Sales price increases offset around half of the currency loss following the sharp depreciation of the Russian ruble and the Ukrainian hryvnia. The new SDHI fungicides contributed notably to growth in the region, with sales of SEGURIS® and VIBRANCE® both increasing by more than 75 percent. Sales growth was strong in the fourth quarter due to the expansion of the HYVIDO® hybrid barley solution, the consolidation of seeds acquisitions and from strong early demand for crop protection products for the 2015 growing season.

North America

Sales decreased by 7 percent, 6 percent at constant exchange rates as volume decreased by 8 percent and local currency sales prices increased by 2 percent. The sales decrease largely was due to the prolonged cold temperatures in the first half of the year, which delayed the start of the US season and reduced disease and insect pressure. In Canada, sales decreased as cereals acreage was lower and demand was further affected by flooding. Non-selective herbicide sales in the region decreased as a result of the deliberate reduction in sales of lower margin glyphosate. In seeds, soybean sales were higher due to increased acreage and increased bulk shipments under an early order program. Corn sales decreased due to reduced acreage. In late December, Chinese import approval for the AGRISURE VIPTERA® corn trait was secured.

Latin America

Sales increased by 7 percent, 9 percent at constant exchange rates as volume increased by 7 percent and local currency sales prices increased by 2 percent. Excluding glyphosate, sales at constant exchange rates increased by 15 percent. The sales growth occurred despite irregular rainfall, which caused some delays in planting and crop protection consumption. In Crop Protection, sales of the new fungicide ELATUS™ exceeded \$300 million following its launch in Brazil, where there was also strong insecticide growth due to severe caterpillar pressure in soybean, corn and cotton. Sales of crop protection products for sugar cane decreased due to drought during the summer and to lower ethanol prices affecting the profitability of sugar cane mills. Corn seed sales increased slightly despite lower acreage. Soybean increased significantly due to the combination of increased planted area and a gain in market share.

Asia Pacific

Sales increased by 5 percent, 10 percent at constant exchange rates as volume increased by 4 percent, and local currency sales prices increased by 6 percent. Growth occurred in both emerging and developed markets and was particularly strong in South Asia, China and Australasia. Increased fungicides sales reflected further adoption of AMISTAR[®] technology in China and new launches in South Asia. Sales growth was double-digit for GRAMOXONE[®] due to tight supply, particularly in ASEAN, but after a strong first half, sales in China were significantly lower in the second half of the year as a government ban on liquid paraquat formulations took effect. Sales of vegetables increased driven by further adoption of MAXVEG[™] protocols as well as sweet corn seed growth in China and South Asia. In rice, sales grew due to products from the Devgen acquisition and expansion in India.

Lawn and Garden: major brands ICON[®], GOLDFISCH[®], GOLDSMITH SEEDS, YODER[®], SYNGENTA FLOWERS

Lawn and Garden sales were flat compared with 2013 and increased by 1 percent at constant exchange rates due to increased local currency sales prices. Sales volume was flat as growth in emerging markets in Asia Pacific and Latin America was offset by challenging conditions in Flowers, particularly in Europe due to low consumer confidence in the key German and French markets and the impact of product portfolio streamlining to focus on high value chemistry and genetics. Turf and landscape sales increased with double digit growth in the fourth quarter, reflecting a recovery in the golf market that earlier in the year was affected by poor weather conditions in North America and Japan.

Sales by product line are set out below:

(\$m, except change %)	2014	2013	Change				Actual %
			Volume %	Local price %	CER %	Currency %	
Product line							
Selective herbicides	3,083	3,051	0%	3%	3%	-2%	1%
Non-selective herbicides	1,445	1,545	-12%	8%	-4%	-2%	-6%
Fungicides	3,518	3,035	16%	1%	17%	-1%	16%
Insecticides	2,066	1,912	7%	3%	10%	-2%	8%
Seedcare	1,115	1,228	-8%	2%	-6%	-3%	-9%
Other crop protection	154	152	3%	1%	4%	-3%	1%
Total Crop Protection	11,381	10,923	3%	3%	6%	-2%	4%
Corn and soybean	1,665	1,654	1%	3%	4%	-3%	1%
Diverse field crops	827	842	0%	4%	4%	-6%	-2%
Vegetables	663	708	-10%	5%	-5%	-1%	-6%
Total Seeds	3,155	3,204	-2%	4%	2%	-4%	-2%
Elimination*	(95)	(130)	n/a	n/a	n/a	n/a	n/a
Total integrated	14,441	13,997	3%	3%	6%	-3%	3%
Lawn and Garden	693	691	0%	1%	1%	-1%	0%
Group sales	15,134	14,688	2%	3%	5%	-2%	3%

* Crop Protection sales to Seeds

Crop Protection

Selective herbicides: major brands AXIAL[®], CALLISTO[®] family, DUAL MAGNUM[®], BICEP[®] II MAGNUM, FLEX[®], FUSILADE[®]MAX, TOPIK[®]

Sales increased by 1 percent, 3 percent at constant exchange rates as local currency sales prices were increased by 3 percent and volume was flat. Sales in Europe, Africa and the Middle East, particularly AXIAL[®] on cereals and BICEP[®] II MAGNUM on corn, benefited from increased weed pressure caused by the mild winter in the region during the first half of the year. In North America sales of DUAL MAGNUM[®] for corn increased with strong growth in the second half of the year after some pre-emergent sprays were missed in the first half due to the late season. Sales of FUSILADE[®]MAX and FLEX[®] on soybean performed well in the USA and in Argentina, where weed resistance to glyphosate is spreading.

Non-selective herbicides: major brands GRAMOXONE[®], TOUCHDOWN[®]

Sales decreased by 6 percent, 4 percent at constant exchange rates as the impact of deliberate reductions in sales volume of the low margin solo glyphosate product TOUCHDOWN[®] more than offset an 8 percent local currency sales price increase across Syngenta's non-selective herbicide portfolio. The reduction in TOUCHDOWN[®] decreased sales by approximately \$150 million. Sales of GRAMOXONE[®] increased as strong demand and tight supply resulted in volume and price increases, primarily in ASEAN and Latin America.

Fungicides: major brands ALTO[®], AMISTAR[®], BRAVO[®], ELATUS[™], REVUS[®], RIDOMIL GOLD[®], SCORE[®], SEGURIS[®], TILT[®], UNIX[®]

Sales increased by 16 percent, 17 percent at constant exchange rates as volume increased by 16 percent and local currency sales prices were increased by 1 percent. The main contribution to growth came from the new product ELATUS[™], based on the active ingredient SOLATENOL[™], which had strong first year sales in Brazil. Sales of SEGURIS[®], the SDHI fungicide for cereals, grew strongly in Europe. Sales of AMISTAR[®] grew strongly in Europe but this was more than offset by lower sales in the Americas.

Insecticides: major brands ACTARA[®], DURIVO[®], FORCE[®], KARATE[®], PROCLAIM[®], VERTIMEC[®]

Sales increased by 8 percent, 10 percent at constant exchange rates as volume increased by 7 percent and local currency sales prices were increased by 3 percent. Sales grew in all regions except North America, where sales decreased due to the late growing season and low pest pressure. Sales of DURIVO[®] exceeded \$400 million and grew significantly, particularly in Brazil due to strong pest pressure there in soybean, corn and cotton, including the spread of the *helicoverpa* caterpillar.

Seedcare: major brands AVICTA[®], CRUISER[®], DIVIDEND[®], CELEST[®]/MAXIM[®], VIBRANCE[®]

Sales decreased by 9 percent, 6 percent at constant exchange rates as volume decreased by 8 percent and local currency sales prices were increased by 2 percent. Lower Seedcare sales reflected reduced sales to other seed companies in the Americas, where reduced corn acreage and plentiful seed supply affected demand. Sales of CRUISER[®] also decreased due to the suspension of sales of neonicotinoids imposed in the European Union. Sales of VIBRANCE[®], based on the SDHI fungicide sedaxane, continued to grow strongly with sales up by almost 50 percent.

Seeds**Corn and soybean:** major brands AGRISURE[®], GOLDEN HARVEST[®], NK[®]

Sales increased by 1 percent, 4 percent at constant exchange rates as volume increased by 1 percent and local currency sales prices were increased by 3 percent. Sales volumes and local currency prices increased in Europe, Africa and Middle East led by the CIS. Sales in the Americas were flat, with both North and Latin America experiencing the shift from corn to soybean; soybean sales in Brazil benefited from a new business partner strategy. Sales of the AGRISURE VIPTERA[®] corn trait, where Chinese import approval was achieved at year end, remained steady at around 30 percent of US corn seed sales. The new proprietary corn rootworm trait DURACADE[™] was planted for the first time in the USA under the "Right to Grow" program.

Diverse field crops: major brands NK[®] oilseeds, HILLESHÖG[®] sugar beet

Sales decreased by 2 percent but increased by 4 percent at constant exchange rates due to increased local currency sales prices; sales volume was flat. Sunflower sales decreased due to reduced acreage in South East Europe, partially offset by volume and local currency price growth in the CIS. Growth in Cereals sales was driven by Central Europe and was increased in the fourth quarter by consolidation of acquisitions. Lower sugar beet volumes in the USA were partially offset by growth in the CIS. In Asia Pacific, sales of rice increased reflecting sales from the Devgen acquisition as well as expansion in India.

Vegetables: major brands ROGERS®, S&G®

Sales decreased by 6 percent, 5 percent at constant exchange rates as volume decreased by 10 percent and local currency sales prices were increased by 5 percent. The volume decrease was attributable to the divestment of Dulcinea; excluding this divestment, sales at constant exchange rates increased by 6 percent. Asia Pacific sales grew by double digits driven by sweet corn and sweet peppers in China and South Asia. Strong growth in the emerging markets of Africa and the Middle East continued with expanding melon and tomato sales. Sales increased in the developed markets in Europe due to local currency sales price increases. Excluding Dulcinea, sales in North America increased by 3 percent.

Operating income

Variances in the tables below reflect the profit impact of changes year on year. For example, an increase of sales or a decrease in costs is a positive variance and a decrease in sales or increase in costs is a negative variance.

Group Operating Income (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2014	2013	2014	2013	2014	2013	Actual %	CER %
Sales	15,134	14,688	–	–	15,134	14,688	3%	5%
Cost of goods sold	(8,192)	(7,986)	(13)	–	(8,179)	(7,986)	-2%	-3%
Gross profit	6,942	6,702	(13)	–	6,955	6,702	4%	8%
as a percentage of sales	46%	46%	–	–	46%	46%		
Marketing and distribution	(2,497)	(2,394)	–	–	(2,497)	(2,394)	-4%	-8%
Research and development	(1,430)	(1,376)	–	–	(1,430)	(1,376)	-4%	-5%
General and administrative	(910)	(846)	(193)	(179)	(717)	(667)	-7%	-10%
Operating income	2,105	2,086	(206)	(179)	2,311	2,265	2%	9%
as a percentage of sales	14%	14%			15%	15%		

Operating Income/(Loss) (\$m, except change %)	2014	2013	Change %
Europe, Africa and Middle East	1,456	1,430	2%
North America	901	1,047	-14%
Latin America	1,069	1,015	5%
Asia Pacific	560	534	5%
Non-regional	(1,981)	(2,037)	3%
Total integrated	2,005	1,989	1%
Lawn and Garden	100	97	3%
Group	2,105	2,086	1%

The two tables above do not represent income statements prepared under IFRS. Please refer to the information reported in the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Overall Group operating income

Operating income increased by 1 percent to \$2,105 million as profit growth from higher sales volumes and local currency prices, and from lower Seeds inventory provision charges was largely offset by the impact of weaker emerging market currencies, adverse sales product mix and salary and other inflation, particularly in emerging markets. The ratio of operating income to sales was broadly flat.

Sales grew by 3 percent, 5 percent at constant exchange rates with sales volumes 2 percent higher from increases in all regions except North America, where sales decreased due to a delay to the start of the US planting season, reduced insect pressure and the deliberate reduction in sales of solo glyphosate. Overall local currency sales prices were 3 percent higher. Exchange rate movements reduced sales by 2 percent, particularly due to a weaker Brazilian real and currencies in Asia Pacific and Eastern Europe. Gross profit margin increased by 0.3 percentage points, but at constant exchange rates and excluding restructuring and impairment charges was 1.3 percentage points higher; local currency sales price increases, lower charges to inventory provisions following the exceptional \$170 million provision in 2013 and lower 2014 seeds production costs were partly offset by adverse product mix and higher production costs particularly in Crop Protection due to lower capacity utilization from the planned inventory reduction.

Marketing and distribution costs increased by 4 percent, 8 percent at constant exchange rates, due to cost inflation, including the higher level of inflation in emerging markets, higher employee incentive costs compared with the low level in 2013, an approximately \$30 million increase to charges for doubtful receivables and an increase in distribution costs. Research and development expense increased by 4 percent, 5 percent at constant exchange rates, with targeted increases in expenditures partly offset by the gain from the amendments to defined benefit pension plans in the UK and the Netherlands. Research and development expense remained at 9.4 percent of sales.

General and administrative was 8 percent higher than 2013, 7 percent higher excluding restructuring and impairment. General and administrative is reported net of the result of currency hedging programs, which in 2014 was a net income of \$15 million compared with a net loss of \$4 million in 2013. At constant exchange rates, General and administrative excluding restructuring and impairment was 10 percent higher than 2013. Costs in 2014 included higher employee incentive costs than the low level in 2013 and were net of a \$22 million recorded gain on changes to the UK and Netherlands pension plans, while 2013 costs were net of a \$41 million gain on changes to the Swiss pension plan. Litigation expenses were also higher in 2014 due to an increased number of legal actions. Restructuring and impairment, including the portion recorded in Cost of goods sold, is described in Note 6 to the consolidated financial statements in Item 18 and increased by \$27 million in 2014 to \$206 million due to the first year of charges from the AOL program.

Excluding the impact of hedging, the adverse impact on sales of weaker emerging market currencies versus the US dollar in 2014 was only partly offset by the favorable impact on costs from these currencies and that of a weaker Euro and Swiss franc in the second half of the year. Taken together with the \$19 million favorable variance in the net hedging result from the EBITDA program, the overall impact of exchange rate movements on operating income compared with 2013 was approximately an adverse \$170 million. The net adverse impact arising from the weaker Russian ruble and Ukrainian hryvnia was partly mitigated by higher local currency sales price increases, with an increased use of US dollar pricing.

Operating income by segment

Europe, Africa and Middle East (\$m, except change %)	Total as reported under		Restructuring and		Before restructuring and		Change before	
	2014	IFRS 2013	2014	2013	2014	2013	Actual %	CER %
Sales	4,547	4,223	–	–	4,547	4,223	8%	11%
Cost of goods sold	(2,180)	(1,958)	(13)	–	(2,167)	(1,958)	-11%	-10%
Gross profit	2,367	2,265	(13)	–	2,380	2,265	5%	11%
as a percentage of sales	52%	54%			52%	54%		
Marketing and distribution	(720)	(676)	–	–	(720)	(676)	-7%	-9%
General and administrative	(191)	(159)	(30)	(18)	(161)	(141)	-14%	-16%
Operating income	1,456	1,430	(43)	(18)	1,499	1,448	4%	12%
as a percentage of sales	32%	34%			33%	34%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

1 Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales in Europe, Africa and Middle East were 8 percent higher than in 2013, 11 percent at constant exchange rates, with 7 percent higher sales volumes and an additional 4 percent from increased local currency sales prices. See the Sales commentary section above for further information on sales in the region. Gross profit margin was 1.5 percentage points lower, 1.3 percentage points lower excluding restructuring and impairment. Restructuring and impairment in 2014 included in Cost of goods sold related to the acquisitions completed in the year. Excluding restructuring and impairment, the lower gross profit as a percentage of sales was largely the result of adverse currency movements, particularly that on sales in weaker currencies in the CIS. At constant exchange rates, gross profit margin excluding restructuring and impairment was 0.2 percentage points above 2013, with the higher local currency sales prices partly offset by adverse product mix.

Marketing and distribution costs increased by 7 percent, 9 percent at constant exchange rates due to higher employee incentive costs linked to the strong regional sales performance and an increase in provisions for doubtful receivables due to weaker customer liquidity in parts of the region.

General and administrative was 20 percent higher including increased restructuring charges. Excluding restructuring and impairment, expenses were 14 percent higher and were 16 percent higher at constant exchange rates including increased amortization expense and lower government grants. Restructuring and impairment charges were \$43 million in 2014 compared with \$18 million in 2013 due to the introduction of the AOL program and the reversal of inventory step-ups on acquisitions.

Operating income as a percentage of sales decreased by 2 percentage points to 32 percent. Excluding the impact of restructuring and impairment, operating income margin decreased by 1 percentage point to 33 percent due to the impacts of weaker currencies relative to the US dollar; otherwise operating income margin was broadly flat. Overall, currency movements compared with the US dollar reduced operating income excluding restructuring and impairment by an estimated \$114 million largely due to weaker currencies in Russia and the Ukraine.

North America (\$m, except change %)	Total as reported under		Restructuring and		Before restructuring and		Change before	
	2014	IFRS 2013	2014	2013	2014	2013	Actual %	CER %
Sales	3,582	3,848	–	–	3,582	3,848	-7%	-6%
Cost of goods sold	(2,003)	(2,169)	–	–	(2,003)	(2,169)	8%	8%
Gross profit	1,579	1,679	–	–	1,579	1,679	-6%	-4%
as a percentage of sales	44%	44%			44%	44%		
Marketing and distribution	(564)	(544)	–	–	(564)	(544)	-4%	-4%
General and administrative	(114)	(88)	(22)	(27)	(92)	(61)	-51%	-51%
Operating income	901	1,047	(22)	(27)	923	1,074	-14%	-11%
as a percentage of sales	25%	27%			26%	28%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

1 Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Reported sales declined by 7 percent, 6 percent at constant exchange rates, due to 8 percent lower sales volumes partially offset by 2 percent higher local currency sales prices. See the Sales commentary section above for further information on sales in the region. Gross profit margin increased by 0.5 percentage points from lower inventory provisions following the exceptional charge in 2013 and reduced Seeds production costs, partly offset by adverse product mix.

Marketing and distribution costs were 4 percent higher due to higher distribution costs and some increase in employee incentives from the low level in 2013.

General and administrative excluding restructuring and impairment increased by \$31 million mainly due to increased litigation defense costs and a decrease in compensation received from granting access by others to Syngenta product registration data.

Restructuring and impairment costs in 2014 included \$12 million for initiatives under the AOL program to restructure marketing and commercial operations and to optimize production capacity. Other cash costs were due to closure of activities that were not divested with the Dulcinea business and to final charges under previous restructuring programs. Restructuring and impairment charges in 2013 included final charges of \$11 million for amortization of reacquired rights related to the Greenleaf Genetics LLC acquisition in 2010, and \$6 million impairment of a trademark which was phased out in 2013.

Operating income as a percentage of sales decreased by 2 percentage points as a result of higher distribution costs on a lower sales volume and litigation expenses.

Latin America (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2014	2013	2014	2013	2014	2013	Actual %	CER %
Sales	4,279	3,991	–	–	4,279	3,991	7%	9%
Cost of goods sold	(2,492)	(2,290)	–	–	(2,492)	(2,290)	-9%	-14%
Gross profit	1,787	1,701	–	–	1,787	1,701	5%	3%
as a percentage of sales	42%	43%			42%	43%		
Marketing and distribution	(615)	(594)	–	–	(615)	(594)	-4%	-14%
General and administrative	(103)	(92)	(26)	(5)	(77)	(87)	11%	11%
Operating income	1,069	1,015	(26)	(5)	1,095	1,020	7%	-2%
as a percentage of sales	25%	25%			26%	26%		

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¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales increased by 7 percent, 9 percent at constant exchange rates with 7 percent from higher volumes and an additional 2 percent from increased prices. See the Sales commentary section above for further information on sales in the region. Gross profit margin was 1 percentage point lower at 42 percent mainly due to adverse mix in Crop Protection products as the result of higher initial cost of goods in ELATUS™ and lower margins in Seeds. With a significant proportion of sales priced in US dollars, gross profit margin at constant exchange rates is approximately 2 percentage points lower than last year, not benefiting from the weaker Brazilian exchange rate impact on cost of goods sold.

Marketing and distribution costs were 4 percent higher than 2013, up 14 percent at constant exchange rates due to relatively high local cost inflation, particularly in Argentina, higher charges to provisions for doubtful receivables due to a deteriorating macroeconomic situation in parts of the region, an increase in employee incentives from the low level in 2013 and launch costs for ELATUS™; together these more than offset savings from restructuring the commercial organisation in Argentina.

General and administrative excluding restructuring and impairment was \$10 million, 11 percent lower than 2013 due to cost savings following completion of a system project and progress in outsourcing certain back office activities.

Restructuring and impairment costs increased by \$21 million to \$26 million in 2014. 2014 included non-cash impairments of \$14 million for the write-down of machinery in Brazil due to significant changes in production processes and \$9 million for initiatives to drive efficiencies in local commercial operations under the AOL program. Restructuring and impairment charges in 2013 related to the implementation of standard systems and processes to centralize and partly outsource back office activities.

Operating income increased by \$54 million, but was \$75 million higher excluding restructuring and impairment. Operating income as a percentage of sales declined by 0.5 percentage points. Excluding restructuring and impairment, operating income as a percentage of sales was flat, but was approximately 3 percentage points lower at constant exchange rates due to the lower gross profit margin and increased Marketing and distribution costs. The Brazilian real and Argentine peso weakened during 2014. As a significant portion of sales in these countries are priced in US dollars, whereas expenses and part of cost of goods sold are in local currencies, operating income increased by approximately \$95 million as a result of the weaker currencies, including the adverse impact the weaker currencies had on those sales where US dollar pricing was not possible.

Asia Pacific (\$m, except change %)	Total as reported under		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2014	IFRS 2013	2014	2013	2014	2013	Actual %	CER %
Sales	2,033	1,935	–	–	2,033	1,935	5%	10%
Cost of goods sold	(1,107)	(1,041)	–	–	(1,107)	(1,041)	-6%	-9%
Gross profit	926	894	–	–	926	894	4%	10%
as a percentage of sales	46%	46%			46%	46%		
Marketing and distribution	(314)	(300)	–	–	(314)	(300)	-5%	-8%
General and administrative	(52)	(60)	(4)	(6)	(48)	(54)	11%	10%
Operating income	560	534	(4)	(6)	564	540	5%	13%
as a percentage of sales	28%	28%			28%	28%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Sales increased by 5 percent and were 10 percent higher at constant exchange rates due to 4 percent higher sales volumes and 6 percent higher local currency sales prices. See the Sales commentary section above for further information regarding sales in the region. Gross profit margin declined by 0.6 percentage points, but was broadly flat at constant exchange rates as an increase in production costs in Crop Protection offset the benefits of the higher local currency sales prices.

Marketing and distribution costs were 5 percent higher, 8 percent at constant exchange rates, partly from increased employee incentives in line with regional business performance.

General and administrative excluding restructuring and impairment decreased by 11 percent, 10 percent at constant exchange rates due to the settlement of an insurance claim in 2014, while 2013 included a provision for a product liability case.

Restructuring and impairment charges in 2014 decreased from 2013 due mainly to lower costs from the integration of Devgen, acquired in 2012.

Operating income margin remained at 28 percent in 2014. Operating income margin excluding restructuring and impairment was also flat, but was 1 percentage point higher at constant exchange rates with expense growth constrained below sales growth.

Non-regional

Non-regional costs decreased by \$56 million, or 3 percent from 2013, to \$1,981 million largely due to a decrease in cost of goods sold of \$123 million reflecting more favorable production cost variances in the Seeds business compared with 2013. Research and development expense increased by 4 percent, 6 percent at constant exchange rates, to \$1,376 million. Increased spending on research and development was in line with Syngenta's medium-term plan of expenditure in the upper end of the 9-10 percent of sales range; in 2014 the increase was offset by the impact of \$49 million of gains from pension plan amendments included in Research and development. Global marketing expense increased by \$6 million. General and administrative is reported including hedging gains of \$13 million, compared with losses of \$16 million in 2013. Excluding the net hedging result and restructuring and impairment, General and administrative increased by \$39 million to \$320 million mainly due to increased employee incentives and higher pension expenses, partly offset by favorable currency impacts on underlying expenditures. In 2013, \$41 million of benefit for the amendment of the Swiss pension plan was included in Non-regional, General and administrative, compared with \$22 million of benefit in 2014 from the amendments to the UK and Netherlands pension plans. Restructuring and impairment charges within non-regional decreased by \$5 million to \$96 million as the first year of costs from the AOL program announced in early 2014 were more than offset by decreased impairment charges.

Lawn and Garden (\$m, except change %)	Total as reported under IFRS		Restructuring and impairment		Before restructuring and impairment ¹		Change before restructuring and impairment ¹	
	2014	2013	2014	2013	2014	2013	Actual %	CER %
Sales	693	691	–	–	693	691	0%	1%
Cost of goods sold	(318)	(313)	–	–	(318)	(313)	-2%	-1%
Gross profit	375	378	–	–	375	378	-1%	1%
as a percentage of sales	54%	55%			54%	55%		
Marketing and distribution	(174)	(176)	–	–	(174)	(176)	1%	0%
Research and development	(54)	(56)	–	–	(54)	(56)	4%	4%
General and administrative	(47)	(49)	(15)	(22)	(32)	(27)	-16%	12%
Operating income	100	97	(15)	(22)	115	119	-3%	9%
as a percentage of sales	14%	14%			17%	17%		

This table does not represent an income statement prepared under IFRS. Please refer to the segmental information reported in Note 4 to the consolidated financial statements in Item 18.

¹ Amounts before restructuring and impairment are non-GAAP measures. Please refer to Appendix A of the Operating and Financial Review for a more detailed description.

Lawn and Garden sales in 2014 remained at 2013 levels, with a 1 percent increase in local currency sales prices offset by a 1 percent currency impact. See the Sales commentary section above for further information on sales in the segment. Gross profit margin decreased by 0.6 percentage points but was flat at constant exchange rates.

Marketing and distribution costs were 1 percent lower, flat at constant exchange rates and were tightly constrained in the context of the low revenue growth.

General and administrative is reported net of an \$8 million hedging gain under the EBITDA program compared with \$15 million in 2013. General and administrative excluding restructuring and impairment and hedging gains was \$40 million in 2014 compared with \$42 million in 2013.

Restructuring costs in 2014 decreased by \$7 million compared with 2013. 2013 included cash costs and the write-down of inventories following a major product range rationalization as well as \$4 million of closing adjustments to the fair value of the consideration of 2012 divestments. Restructuring costs in 2014 were due to continuing restructuring of the Flowers business, including initiatives to improve efficiency as part of the AOL program.

Operating income as a percentage of sales was flat at 14 percent, 17 percent excluding restructuring and impairment.

Defined Benefit Pensions

Defined benefit pension expense was a credit of \$36 million in 2014 compared with a charge of \$95 million in 2013. The main reason for the credit was the \$143 million gain on amendment of the UK pension plan, partly offset by an increase in current service cost driven by the impact of lower discount rates. 2013 pension expense included a \$41 million gain on amendment of the Swiss pension plan.

Syngenta contributions to defined benefit pension plans were \$185 million in 2014 compared with \$131 million in 2013, principally because Syngenta paid a \$25 million additional lump sum contribution resulting from the 2013 Swiss plan amendment at the beginning of 2014, and because the first quarter of 2013 included the final benefits from prior years' accelerated contribution payments to the UK plan. No accelerated contributions were made in either 2014 or 2013.

Restructuring and impairment

Restructuring and impairment charges for the years ended December 31, 2014 and 2013, broken down into the main restructuring initiatives, consisted of the following:

(\$m)	2014	2013
Accelerating operational leverage programs:		
Cash costs	49	–
Non-cash impairment costs	14	–
Integrated crop strategy programs:		
Cash costs	61	60
Operational efficiency programs:		
Cash costs	18	33
Non-cash impairment costs	–	6
Acquisition and related integration costs:		
Cash costs	27	30
Non-cash items		
Reversal of inventory step-ups	13	–
Reacquired rights	–	11
Divestment losses	–	4
Other non-cash restructuring and impairment:		
Non-current asset impairment	24	35
Total restructuring and impairment¹	206	179

¹ \$13 million (2013: \$nil) is included within Cost of goods sold and \$193 million (2013: \$179 million) as Restructuring.

2014

For discussion regarding Restructuring and Impairment during 2014, please see the “Restructuring and Impairment” sub-section of the preceding “2015 compared with 2014” section under “Results of Operations” in this “Operating and Financial Review and Prospects”.

2013**Integrated crop strategy programs**

Cash costs of \$60 million included \$27 million of charges for consultancy and advisory services, re-training of employees and project management, \$17 million for information system infrastructure projects, \$8 million for legal entity merger projects to combine former Seeds and Crop Protection legal entities, \$6 million to restructure the Research and Development function and \$2 million for integration of marketing and sales operations, mainly in Europe.

Operational efficiency programs

Operational efficiency cash costs of \$33 million included \$18 million related to the completion of the projects to standardize and consolidate global back office operations, \$9 million for restructuring projects in the Flowers business and \$6 million for various projects including restructuring at the corporate headquarters and outsourcing of human resources support. Non-cash impairment costs consisted of exceptional inventory write-downs made in connection with a restructuring of the Flowers product range to simplify the business and eliminate unprofitable varieties.

Acquisition and related integration costs

Cash costs of \$30 million included \$23 million to integrate previous acquisitions, mainly Devgen, Sunfield and Pasteuria, and \$7 million of transaction charges, including those related to uncompleted transactions.

As part of an acquisition in 2010, Syngenta reacquired exclusive licensing rights that it had previously granted to the seller. In accordance with IFRS, the reacquired rights have been recognized as an intangible asset and were being amortized over the remaining term of the original license contract, 3 years.

Divestment losses related to the 2013 divestment of the Dulcinea vegetables business and the sale of an unused site in North America, as well as closing adjustments to the fair value of the consideration on the 2012 divestments of the Syngenta Horticultural Services business and the Fafard peat unit.

Other non-cash restructuring

Other non-current asset impairments included \$12 million for the impairment of a financial asset and \$23 million of intangible asset impairments. Intangible asset impairments included \$16 million to impair product rights acquired with the Devgen acquisition, which will not be used in Syngenta and for which no buyer was found, \$6 million for the impairment of a trademark, phased out during 2013, and another small impairment.

Financial expense, net

Financial expense, net increased to \$217 million in 2014 from \$200 million in 2013. Net currency losses in 2014 of \$139 million were \$5 million higher than 2013 and reflected higher costs of hedging due to currency volatility in Ukraine, Russia and Argentina as well as in other emerging markets. Other financial expenses were \$13 million higher than 2013 mainly due to higher bank transaction taxes in Argentina. Net interest expense of \$43 million in 2014 was similar to 2013.

Taxes

The Swiss statutory tax rate applicable to Syngenta remained flat for 2014 at 22 percent. Syngenta's effective tax rate in 2014 was 14 percent, 1 percent lower than the 15 percent effective tax rate for 2013. Income taxed at different rates reduced the effective tax rate by 4 percent in 2014 (7 percent in 2013), with a lower weighting of income subject to a lower tax rate, including in Switzerland where certain intellectual property income is subject to tax at a reduced rate. Tax deductions for amortization and impairments not recognized for IFRS reduced the tax rate by 3 percent (1 percent in 2013) due to the impairment of the shares held by group companies in a subsidiary resulting from a decrease in the value of the subsidiary as determined under local GAAP. Non-recognition of deferred tax assets increased the tax rate by 3 percent (1 percent in 2013) mainly due to deferred tax assets in parts of Latin America and the CIS where the criteria for recognizing deferred tax assets were not met because of local currency weakness and weak economic conditions.

The tax rate on restructuring and impairment was 18 percent in 2014, compared with 22 percent for 2013 due to the different mix of gains and losses included in the net charge over the period and the varying tax treatments applied in different countries.

Net income for the period and other supplementary income data

Net income attributable to Syngenta shareholders in 2014 was \$1,619 million, 2 percent lower than the 2013 amount of \$1,644 million with, at constant exchange rates, higher sales and slightly improved gross profit margins offset by the adverse impact of emerging market exchange rates and increased restructuring and impairment charges; the aggregate gain recognized on changes to the UK and Netherlands pension plans in 2014 was broadly matched by the gain from an amendment to the Swiss pension plan in 2013 combined with higher employee incentive costs in 2014 than the low level in 2013.

After related taxation, restructuring and impairment charges in 2014 were \$168 million compared with \$141 million in 2013 due to costs related to the AOL program announced in early 2014.

Foreign operations and foreign currency transactions

Syngenta's subsidiaries use their local currency as their functional currency for accounting purposes except where the use of a different currency more fairly reflects their actual circumstances.

Syngenta operates worldwide and its business has grown significantly in emerging markets, with a broadening of the currency effects that need to be closely monitored. Syngenta regularly analyzes how currency fluctuations will impact its operating results and manages the impact with a combination of commercial actions, such as product pricing, and financial risk management strategies, such as hedging. Next to the Euro, the Swiss franc and the British pound, the Brazilian real gives rise to a major currency exposure due to the large size of Syngenta's business activities in Brazil. Sales prices to customers in Brazil largely are linked to the US dollar, which limits the impact of fluctuations in the US dollar/Brazilian real exchange rate, including the significant devaluation of the Brazilian real that occurred in 2015. Similarly, Syngenta manages its currency exposure in the CIS, mainly Russia and Ukraine which both experienced further significant currency devaluation in 2015, by increasing local currency sales prices to compensate the loss in sales value from the currency devaluation.

Syngenta regularly monitors receivables exposure in all countries in which it operates. In the Eurozone, Greece, Italy, Portugal and Spain have been experiencing weak macro-economic conditions since 2010. In Latin America, Argentina, Brazil and Venezuela are also experiencing economic and financial difficulties and exchanging local currency into US dollars in these countries to pay for imported goods can be difficult. The following table outlines for the above named countries the aggregate, gross trade receivables, those past due for more than 180 days and the related provision for doubtful receivables at December 31, 2015 and 2014.

(\$m)	2015	2014
Gross trade receivables	2,256	1,794
Past due for more than 180 days	209	111
Provision for doubtful trade receivables	186	118

A major proportion of growers in Argentina using Syngenta's products export their crops, which enables them to generate income that is economically linked to the US dollar. Because of this, Syngenta is able to price most of its sales in Argentina in US dollars through to cash collection, which reduces its exposure to the Argentine peso. However, future legislation, competitors' behavior or central bank restrictions may limit or remove this protection or further limit the ability of Syngenta to access US dollars in, or remit US dollars from, Argentina. Sales in Argentina were 3 percent of Syngenta's total sales in 2015.

Receivables exposure from customers in Russia and the Ukraine has reduced during 2015, with 100 percent of 2014 sales and 85 percent of 2015 sales in those countries having been collected as of December 31, 2015. Sales in the CIS were 5 percent of Syngenta's total sales in 2015.

At December 31, 2015, approximately 65 percent of Syngenta's cash and cash equivalent was held in US dollars, approximately 11 percent in Indian rupees, approximately 4 percent in Brazilian real, approximately 3 percent in Euros, and approximately 2 percent in Thai baht. No other individual currency made up more than 2 percent.

Liquidity and capital resources

Syngenta's principal source of liquidity is cash generated from operations. This has been more than sufficient to cover cash used for investment activities in all years since 2006, except in 2012 when the higher level of cash used for investing activities resulting from increased business acquisitions required funding with a combination of cash generated from operations and the issuance of unsecured non-current bonds. Except for any significant business acquisitions or a significant deterioration in the rate of receivables collections from that currently expected by management, cash generated from operations is expected to be more than sufficient to cover cash expected to be used for investment activities in 2016.

Working capital fluctuations are supported by short-term funding available through commercial paper and related syndicated committed credit facilities. Operating in a seasonal business, Syngenta typically obtains funds from its short-term facilities during the first half of the year to fund operations during the northern hemisphere growing season and repays these funds during the second half when receivables are collected. Longer-term capital resources include unsecured non-current bonds issued under a Euro Medium Term Note (EMTN) program, unsecured non-current Notes issued under a Note Purchase Agreement in the US Private Placement market and unsecured non-current bonds issued in the US public debt market. See Capital markets and credit facilities for details of outstanding debt, including debt issued in 2015.

For information on Syngenta's funding and treasury policies and objectives in terms of the manner in which treasury activities are controlled, please see Note 27 to the consolidated financial statements in Item 18.

Syngenta reported cash and cash equivalents on December 31, 2015 and 2014 of \$1,141 million and \$1,638 million, respectively. At December 31, 2015 and 2014, Syngenta had current financial debt of \$547 million and \$1,137 million, respectively, and non-current financial debt of \$3,183 million and \$2,752 million, respectively.

Capital markets and credit facilities

Funds for Syngenta's working capital needs were available during the year from its \$2,500 million Global Commercial Paper program supported by a \$1,500 million committed, revolving, multi-currency, syndicated credit facility. Syngenta entered into its Global Commercial Paper program in 2000 and amended it in 2007. At December 31, 2015 and 2014, Syngenta had no commercial paper issuances outstanding.

The \$1.5 billion syndicated credit facility (the "Credit Facility") was signed in 2012 and will mature in 2019. The Credit Facility provides for fixed interest rate, multi-currency short-term borrowings, with the interest rate based on LIBOR. At December 31, 2015, Syngenta had no borrowings under the Credit Facility. In January 2016, the terms of Syngenta's \$1.5 billion committed, revolving, multi-currency syndicated credit facility were amended to enable Syngenta to establish an additional \$1 billion committed, syndicated facility. This additional facility was established in January 2016 and expires in 2019.

Absent major acquisitions, Syngenta targets maintaining an investment grade credit rating, as recognized by major third-party rating agencies, which it currently believes provides an optimal balance between financial flexibility and the cost of capital. Syngenta's short- and long-term credit facilities and outstanding bond note instruments do not contain any significant covenants affecting its ability to pay dividends or borrow additional funds. In addition, there are no material legal or economic restrictions on the ability of subsidiaries to transfer funds to the Company in the form of cash dividends except as disclosed in the consolidated cash flow statement in Item 18.

The table below summarizes Syngenta's unsecured notes in issuance at December 31, 2015:

(\$m)	Issuance date	Carrying amount	Value at issue
Euro floating rate note 2017	March 2014	272	344
0.750% CHF bond 2019	March 2014	353	396
5.110% US dollar private placement 2020	December 2005	85	75
1.875% Eurobond 2021	March 2014	543	689
3.125% US dollar bond 2022	March 2012	519	500
1.625% CHF bond 2024	March 2014	251	283
5.350% US dollar private placement 2025	December 2005	75	75
1.250% Eurobond 2027	March 2015	540	559
2.125% CHF bond 2029	March 2014	151	170
5.590% US dollar private placement 2035	December 2005	100	100
4.375% US dollar bond 2042	March 2012	248	250
Total		3,137	3,524

While Syngenta may continue to issue further bonds to replace existing debt or to manage the maturity profile of financial debt, management is of the opinion that, absent a major business acquisition or a very significant deterioration in working capital or the rate of receivables collections from that currently expected, the funding available from the sources described above will be sufficient to satisfy Syngenta's working capital, capital expenditures and debt service requirements for the foreseeable future, including cash expenditures relating to restructuring programs. In the event of a major business acquisition, Syngenta would seek additional funding from capital markets or other sources. Syngenta regards as sufficiently remote the likelihood that a very significant deterioration in working capital or unexpected decline in the rate of receivables collections will occur so as not to require the development of a detailed contingency funding plan.

On February 2, 2016, Syngenta entered into the Transaction Agreement with ChemChina and China National Agrochemical Corporation. For discussion of the potential impact of this event on Syngenta's credit facilities and unsecured notes, see Trend and Outlook—ChemChina Tender Offer.

Cash flow

The following table sets out certain information about cash flow for each of the periods indicated:

(\$m)	Year ended December 31,		
	2015	2014	2013
Cash flow from operating activities	1,190	1,931	1,214
Cash flow used for investing activities	(462)	(729)	(772)
Cash flow used for financing activities	(1,188)	(420)	(1,114)

Cash flow from operating activities**2015 compared with 2014**

Cash flow from operating activities decreased by \$741 million to \$1,190 million in 2015 from \$1,931 million in 2014 largely due to changes in net working capital. Cash inflows from inventory reduction in 2015 were \$32 million compared with \$326 million in 2014; year-end inventories as a percentage of sales were 32 percent in both years. Outflows from trade and other working capital assets increased by \$536 million in 2015 largely due to delayed collections and extended sales terms in Latin America and the change in sales terms in Brazil, which brought forward the recognition of receivables. Cash inflows from trade and other working capital liabilities increased by \$175 million in 2015 from a low level in 2014 following the inventory reduction in the year; the 2015 increase also included higher accrued expenses, including those related to restructuring charges. Income before taxes in 2015 decreased by \$303 million from 2014 for the reasons described above. Non-cash items were \$395 million higher in 2015 mainly due to the \$403 million net charges in respect of provisions; net charges in respect of pension provisions were \$148 million in 2015 compared with a net credit of \$35 million in 2014, and net charges to restructuring provisions were \$125 million higher in 2015; adjusted for non-cash items, income before taxes was \$92 million higher than 2014. Cash outflows for financial expense, net decreased from 2014 to 2015 due to lower interest payments and net realized foreign exchange. Cash paid in respect of income taxes was \$152 million higher than in 2014 including payments in respect of several tax years for an entity in Switzerland. Cash contributions to pension plans were \$28 million lower in 2015; 2014 included a non-recurring, additional payment of \$25 million made to the Swiss plan as part of the 2013 plan amendment. Cash paid in 2015 in respect of restructuring provisions was \$99 million higher than 2014 largely due to the progression of the AOL restructuring program.

2014 compared with 2013

Cash flow from operating activities increased \$717 million from \$1,214 million in 2013 to \$1,931 million in 2014 largely due to changes in net working capital. Cash inflows from a planned inventory reduction in 2014 were \$326 million, compared with outflows of \$884 million in 2013 from an inventory build, a favorable turnround of \$1,210 million. Outflows from trade and other working capital assets were similar in 2014 and 2013, although in 2014 a reduction in customer early-pay and advance payments and some increase in trade receivables, due to the late season in Latin America and lower liquidity in some emerging markets, partially was offset by increased non-recourse discounting. Cash inflows from trade and other working capital liabilities decreased by \$315 million in 2014, partially due to lower raw material purchases as a result of the inventory reduction and a reduced level of prepayments by customers. Income before taxes in 2014 decreased \$39 million from 2013 for the reasons described above. Non-cash items were \$102 million lower in 2014 mainly due to the higher gains from pension plan amendments recognized during the year; adjusted for non-cash items, income before taxes was \$141 million lower than 2013. Cash outflows for financial expense, net was broadly flat from 2013 to 2014 and cash paid in respect of income taxes was \$38 million higher than in 2013, and in 2014 was higher than the income statement charge. Cash contributions to pension plans were \$56 million higher in 2014 including a non-recurring, additional payment of \$25 million made to the Swiss plan as part of the 2013 plan amendment.

Cash flow used for investing activities

2015 compared with 2014

Cash flow used for investing activities was \$462 million in 2015, \$267 million less than in 2014. Additions to property, plant and equipment were \$147 million lower than 2014 as investments were reduced in response, in part, to the lower growth in the crop protection and seeds markets seen in 2014 and 2015, and which is expected currently for 2016. Proceeds from disposals increased by \$43 million in 2015, which included the sales of land in Switzerland and the US. The cash outflows for business acquisitions decreased from \$86 million in 2014, which was for the purchase of of PSB and the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, to \$11 million in 2015, which includes the acquisition of Land.db Enterprises Inc.

2014 compared with 2013

Cash flow used for investing activities was \$729 million in 2014, \$43 million less than in 2013. Proceeds from disposals increased by \$33 million in 2014, including the sale of a site in Turkey and the sale of shares in an equity investment by Syngenta's Ventures unit. Syngenta continued to invest in projects to increase its production and research capacity, but at a reduced level compared with 2013. Purchases of intangible and financial assets increased over 2013 including further investment in ENOGEN[®] technology. The cash outflows for business acquisitions decreased from \$101 million in 2013 for the purchase of MRI, to \$86 million in 2014. The cash outflow of \$1 million for business divestments in 2014 was for an earn-out payment related to a previous divestment.

Cash flow used for financing activities

2015 compared with 2014

Cash flow used for financing activities of \$1,188 million was \$768 million higher than in 2014 mainly due to a decrease in new borrowings. Syngenta issued EUR 500 million in Euro denominated bonds in 2015, and EUR 750 million in Euro denominated bonds and CHF 750 million in Swiss domestic bonds in 2014. In both 2015 and 2014, bonds of EUR 500 million were repaid at maturity. The dividend paid to shareholders in 2015 increased by \$46 million compared with 2014. Net treasury share purchases were \$70 million lower in 2015; in 2015, Syngenta repurchased 389,500 of its own shares, with 158,000 shares to be used for future requirements of share based payment plans and 231,500 related to a share repurchase program. Sales of treasury shares related to employee share and share option plans.

2014 compared with 2013

Cash flow used for financing activities of \$420 million was \$694 million lower than in 2013 due mainly to increased borrowings. In 2014 Syngenta issued EUR 750 million in Euro denominated bonds and CHF 750 million in Swiss domestic bonds. In 2014 and 2013, bonds of EUR 500 million and CHF 500 million, respectively, were repaid at maturity. The dividend paid to shareholders in 2014 increased \$111 million compared with 2013. Net treasury share purchases were \$11 million higher in 2014; in 2014, Syngenta repurchased 440,095 of its own shares, with 304,095 shares to be used for future requirements of share based payment plans and 136,000 related to a share repurchase program. Sales of treasury shares related to employee share and share option plans.

Research and development ("R&D")

Syngenta's Research and Development organization is dedicated to developing quality crop protection and seeds products, as well as crop-focused solutions which integrate multiple technologies. R&D focuses on taking a holistic approach to help customers grow their specific crop using the best technology to address their needs, be it a single technology, a combination of technologies, or technologies and services.

Syngenta is committed to improving crop yield and quality in a sustainable way and, through its global product safety group and global regulatory team, is committed to developing and registering products that are safe and effective. Syngenta maximizes its innovation potential by leveraging its industry expertise and partnering with other technology leaders across the globe.

The total spent on research and development was \$1,362 million in 2015, \$1,430 million in 2014 and \$1,376 million in 2013. Attribution of research and development costs for 2015 was \$1,310 million for Syngenta's integrated Crop Protection and Seeds business and \$52 million in Lawn and Garden. In 2014, the attribution was \$1,376 million for Syngenta's integrated Crop Protection and Seeds business and \$54 million in Lawn and Garden. In 2013, the attribution was \$1,320 million for the integrated business and \$56 million in Lawn and Garden.

There are no off-balance sheet financing transactions associated with research and development activity.

Contractual obligations, commitments and contingent liabilities

At December 31, 2015, Syngenta had contractual obligations to make future payments in the periods indicated in the following:

(\$m)	Notes to the financial statements reference	Total	Less than	1–3	3–5	5–10	More than
			1 year	years	years	years	10 years
Financial debt	16, 18	3,671	533	273	438	1,388	1,039
Interest on fixed rate financial debt	27	785	67	134	131	196	257
Other non-current liabilities	18	26	12	6	8	–	–
Capital lease payments	25	60	18	20	14	8	–
Operating lease payments	25	120	61	30	22	7	–
Capital expenditures	25	134	65	69	–	–	–
Pension contribution commitments	22	206	44	83	79	–	–
Unconditional purchase obligations	25	947	483	379	45	40	–
Long-term research agreements and other long-term commitments	25	135	55	41	22	17	–
Total		6,084	1,338	1,035	759	1,656	1,296

Of the total financial debt, floating rate financial debt is \$534 million (mainly local bank loans and overdraft facilities), all of which is due within one year. No interest obligation in respect of this debt is included in the table above. There is no contractual obligation to renew this debt. The debt amount, and the interest payments associated with it, will vary over time according to Syngenta's funding requirements and future interest rates.

Fixed rate debt of \$3,137 million is comprised primarily of the outstanding Eurobonds, Swiss franc domestic bonds and \$ bonds and private placement notes. Fixed rate interest payments of \$785 million on these are included above.

Other non-current liabilities arise from deferred payments related to acquisitions and license agreements.

Provisions for long-term liabilities totaling \$727 million shown in Syngenta's consolidated balance sheet have not been included in the above table because the timing of their payment is not contractually fixed and cannot be estimated with sufficient certainty within the context of the time periods in the table. This applies particularly to those amounts which are not expected to be paid during 2016. Note 19 to the consolidated financial statements in Item 18 presents the components of the estimated \$193 million of provisions that are expected to be paid during 2016.

The supply agreements for materials giving rise to the unconditional purchase obligations are entered into by Syngenta to ensure availability of materials meeting the specifications required by Syngenta. Where suppliers have made significant capital investment, these agreements generally provide for Syngenta to pay penalties in the event that it terminates the agreements before their expiry dates.

Pension contribution commitments totaling \$206 million represent unconditional fixed payments to the UK pension fund according to the schedule of contributions agreed during 2015. Not included in the above table are:

- Additional UK Pension Fund contributions of up to \$22 million per year which are required to be paid if the actual return on UK pension plan assets over the period to November 30, 2020 is less than the agreed assumption.
- Swiss Pension Fund contributions for future service. The rules of Syngenta's main Swiss defined benefit pension fund commit Syngenta to contributing a fixed percentage of employees' pensionable pay to the fund.
- As disclosed in Note 22 to the consolidated financial statements in Item 18, Syngenta expects to pay \$160 million of contributions to its defined benefit pension plans in 2016 excluding restructuring costs and excluding any accelerated payments which Syngenta may decide to make as business and financial market conditions develop during 2016. \$44 million of these contributions are included as commitments in the table above. The remaining \$116 million represents 2016 service contributions, which are not included as commitments in the table above.

The above table excludes income tax liabilities of \$382 million in respect of uncertain tax positions. These are presented within current income tax liabilities in the consolidated balance sheet because it is not possible to make a reasonably reliable estimate of the actual period of cash settlement with the respective taxing authorities.

Off-balance sheet arrangements

Syngenta had no off-balance sheet arrangements as at December 31, 2015, other than the above contractual obligations, commitments and contingent liabilities. Syngenta has no unconsolidated special purpose entities that are likely to create material contingent obligations.

Critical accounting estimates

Critical accounting estimates and new accounting pronouncements are discussed in Notes 2 and 29 to the consolidated financial statements in Item 18.

Recent developments

Note 30 to the consolidated financial statements in Item 18 provides details of events which occurred between the balance sheet date and February 2, 2016 that would require adjustment to or disclosure in the consolidated financial statements. No events have occurred between February 2, 2016 and February 11, 2016, the date of this filing, that would require disclosure.

Trend and Outlook

Syngenta believes that the long-term fundamental industry growth drivers of population growth and dietary change trends, leading to increasing demand for food and feed, remain in place. However, in both 2014 and 2015 favorable seasonal weather conditions in key growing areas, particularly in North America, have led to high yields in the production of the major field crops. As a result, there has been downward pressure on the prices of agricultural commodities; this in turn has reduced farmer profitability and led to downward pressure on the markets for crop protection chemicals and seeds. The current lower oil prices may reduce growth in the usage of biofuels, but environmental regulations in some countries, including the United States, require the inclusion of minimum percentages of biofuels in gasoline and this will underpin current levels of usage. Prices of a basket of the key field crops of corn, soybean, wheat and rice continued to decline in 2015 and are now below those in the immediate aftermath of the global financial crisis in the 2009 to 2011 period. In Latin America, the lower US dollar crop prices of the major corn and soybean crops have been partly offset by weaker currency exchange rates relative to the US dollar, but crop input demand has been further constrained by deteriorating liquidity, leading in some cases to credit quality issues. Given the likely continuation of lower grower incomes and resulting pressure on the use of high quality seed and chemical inputs, Syngenta currently anticipates low market growth to continue in 2016.

Weaker foreign exchange rates relative to the US dollar had a significant impact on reported sales in 2015. While the impact on operating profit is discussed below, exchange rate movements reduced reported sales in 2015 by approximately 12 percent, with sales in Euro reduced by approximately 15 percent and sales in emerging markets reduced by approximately 16 percent. In some markets, particularly Russia and the Ukraine, where currency decline was over 50 percent, the adverse impact was almost fully offset by local currency sales price increases to maintain US dollar prices. Weaker exchange rates are expected to continue to reduce reported sales in 2016; if exchange rates at the end of 2015 continued through 2016, Syngenta estimates a further adverse impact to reported sales of approximately 4 percent.

At the regional level, the market in **North America** in 2015 reflected lower farmer profitability from the above mentioned low crop prices. Syngenta's sales in the region in 2015 included \$145 million from the license with KWS and Limagrain; a repeat of license income at this level in 2016 is not currently expected. The planned reduction of sales of low margin solo glyphosate reduced 2015 integrated sales volumes in the region by approximately 3 percent; a similar reduction in low margin glyphosate is planned for 2016. In **Europe, Africa and the Middle East**, market growth in 2015 was low following strong growth in 2014, with some adverse impact from low crop prices. Reported sales in 2015 were impacted by the broad currency weakness relative to the US dollar and the sales price increases implemented to offset this, particularly in Russia and the Ukraine. Excluding these countries, sales in the region were broadly flat at constant exchange rates. Underlying growth is expected to remain at moderate levels in 2016. Syngenta targets to offset further emerging market currency weakness with local currency sales price increases; similar price increases are generally not expected to be achievable in the Eurozone and other developed markets. In **Latin America**, the lower crop prices reduced farmer profitability in the major corn, soybean and cotton markets. While this was partly mitigated by weaker local currencies, the negative macroeconomic environment particularly in Brazil reduced liquidity at both grower and distributor level and also reduced demand. In addition, Syngenta constrained sales in some cases due to concerns over credit quality. At the industry level, crop protection channel inventories in Brazil were high at the start of the season and this, compounded by reduced pest pressure, also reduced demand. The difficult macroeconomic and liquidity background is expected to persist in 2016, though the reduction in export taxes in Argentina implemented in 2016 may lead to some improvement in the agricultural sector there. In 2015, Syngenta modified sales terms in Brazil, which changed the point of revenue recognition and resulted in a one-time increase in reported sales of \$239 million; this will not repeat in 2016. Syngenta's sales in the region in 2015 included \$55 million from the aforementioned license with KWS and Limagrain; a repeat of license income at this level in 2016 is not currently expected. The reduction of sales of low margin solo glyphosate reduced 2015 integrated sales volumes in the region by approximately 2 percent and is largely complete in the region. Where possible in the region, Syngenta sells crop protection products under a US dollar price list. Due to the rapid decline of the Brazilian real in the second half of 2015, Syngenta was able to offset only partially the impact of the currency decline; price increases are planned in 2016 to continue to recover losses from the currency decline, but full recovery will be difficult in the context of the market weakness. Further sales volume growth is expected from the continued penetration of ELATUS[®], launched in 2014. Sales declined in **Asia Pacific** in 2015 due to the phase out of paraquat in China, completed in 2015, and drought in ASEAN. In the emerging markets in Asia, the adverse impact on sales of weaker currencies relative to the US dollar was fully offset by local currency sales price increases in 2015; while Syngenta targets to offset any further weakness in a similar manner, success in implementing further sales price increases cannot be assured.

Lawn and Garden profitability as a percentage of sales in 2015 was broadly at the planned target level. The previously announced divestment of the Flowers business will not now be pursued in 2016. Modest overall segment top line growth is anticipated in 2016, with a continued focus on cost control to maintain operating margins at constant exchange rates.

Syngenta continues to target premium prices and to seek opportunities for value pricing related to the incremental value its products bring to growers, though the current slower market growth and competitive markets are expected to limit the scope of price increases. Syngenta has reduced and will continue to reduce sales of products in certain countries where gross profit margins are insufficient to justify the risk capital employed; a further reduction in sales of low margin solo glyphosate is planned in 2016, particularly in North America.

Syngenta has a strong pipeline of new crop protection products at various stages of development and, with market leadership in crop protection chemicals, a strong position in seeds for most key crops and leading commercial organizations in all four regions, Syngenta believes it has a clear competitive advantage to deliver above market sales growth over the longer term. In the nearer term, crop protection product sales growth is expected to be driven by the growth in recently launched ACURON[®], following the launch in the United States in 2015, and SOLATENOL[™], with further expansion in Brazil and launches in 2016 in the United States and France. This is expected to more than offset the further planned reduction in solo glyphosate sales. In Seeds, distinctive technologies such as ENOGEN[®] in corn and HYVIDO[™] hybrid barley are expected to contribute to growth, though in 2016 this is expected currently to be offset by lower license income, as noted above.

In 2016, Syngenta will continue to drive savings and productivity through the AOL program. These savings are expected to be partially offset by inflation, in particular in emerging markets, and a higher level of short-term incentives in 2016 following below target incentives in 2015. In Research and development, savings under the AOL program are targeted in 2016 to more than offset cost inflation and, at constant exchange rates, costs are projected to be lower in 2016 than 2015. Marketing and distribution costs included an increased charge to provisions for doubtful receivables in 2015 compared with 2014, largely due to the deteriorating credit quality in Latin America; assuming no further deterioration, savings from the AOL program in Marketing and distribution costs and General and administrative costs (excluding restructuring) are projected to largely absorb the impacts of salary and other cost inflation and higher employee incentives, as noted above.

Excluding impairments, which cannot be forecast, the further acceleration of the AOL program noted above is expected to result in increased restructuring charges related to this program in 2016. Earlier restructuring programs are substantially complete at the end of 2015, with minimal charges expected in 2016. Given ongoing discussions on industry consolidation and potential corporate transactions involving Syngenta, the level of charges for acquisitions, divestments and related costs in 2016 cannot be predicted reliably and in general the timing of the recognition of charges for particular restructuring events, which is dependent on when irreversible commitments to the events occur, makes it difficult to predict such costs with certainty.

In 2015, oil prices traded in a range of \$50-60 per barrel in the first half of the year and then decreased to approximately \$40 per barrel by the end of the year. Prices have subsequently reduced further to approximately \$30 per barrel at the end of January 2016. With its current product mix, Syngenta estimates that each \$10 movement in the price of a barrel of oil impacts its cost of goods sold by approximately \$30-35 million. However, due to supplier production chains and Syngenta's own inventory, it can take from 9 to 12 months for movements in the oil price to feed through into cost of goods sold.

In 2015, 52 percent of Syngenta's sales were in emerging markets, up from around 35 percent ten years ago. Emerging markets continue to have higher long-term growth potential because significant crop yield gaps exist versus developed markets; this growth potential is further supported by ongoing technology adoption. Managing volatility in such markets, in particular credit and currency exposures, is integral to Syngenta's business model.

Overall, Syngenta has significant currency exposures, which at a high level can be summarized as:

- a short position against the US dollar in Swiss francs and British pounds
- a net long position in Euros over the course of a full year, relatively minor compared with sales in Euros, but with a long position in the first half selling season and a short position in the second half from more evenly spread Euro-based operating costs including raw material costs
- a long position in Japanese Yen, Australian and Canadian dollars and many emerging market currencies
- in Brazil and Argentina, a significant portion of sales are effectively priced in US dollars, resulting in a net short local currency exposure, though the linkage has weakened in Brazil and there can be a time lag before local currency prices are adjusted.

As noted above, following the recent exchange rate volatility in Russia and the Ukraine, Syngenta has acted to link pricing of sales in these countries (both of which export grain to the global market) to US dollars to reduce the long exposure to these currencies. This was achieved in 2015, though with some adverse impact on seeds sales volumes.

Forecast transaction exposures in the major currencies are hedged under a rolling 12 month program, largely through forward contracts. In 2015, Syngenta estimates the impact on underlying sales and costs of exchange rate movements to have been approximately \$577 million adverse to 2014, which together with a net hedging gain of \$21 million compared with a gain of \$15 million in 2014, resulted in an adverse year-on-year impact on operating income from exchange rate movements of approximately \$571 million when compared with 2014. The major driver of the adverse net impact was weaker emerging market currencies, particularly the Russian ruble and Ukrainian hryvnia where the impact of these two currencies was recovered in sales prices; excluding the ruble and hryvnia, the adverse net impact was estimated to be approximately \$100 million. At rates prevailing in January 2016, Syngenta expects an adverse impact on operating income from the underlying exposures. This is due to the adverse impact of a generally stronger US dollar on sales net of the favorable impact of the weaker Swiss franc on operating costs, combined with an adverse net hedging result compared with 2015, particularly hedges of the Brazilian real. Excluding the ruble and hryvnia, the combined adverse year-on-year impacts of the change in the net hedging result and the loss from underlying exposures are estimated to total approximately an adverse \$50-100 million compared with 2015. As noted above, the adverse impact from the weaker ruble and hryvnia is expected to be substantially offset by higher local currency prices from the US dollar sales price lists. Emerging market currency exposures in particular are largely unhedged, so the actual impact may differ positively or negatively from the above estimate. The net hedging result is reported within General and administrative in the consolidated income statement in Item 18.

Subject to approval by the shareholders at the Annual General Meeting on April 26, 2016, the Board is recommending to maintain the regular dividend at CHF 11.00 per share. In addition, if the offer to acquire Syngenta shares through a tender offer described in Note 30 to the consolidated financial statements in Item 18 becomes unconditional, Syngenta will, if approved by the shareholders at the Annual General Meeting on April 26, 2016, pay a special dividend of CHF 5.00 per share immediately before the first settlement of the offer.

ChemChina Tender Offer

On February 2, 2016, Syngenta entered into a transaction agreement (the “Transaction Agreement”) with ChemChina and China National Agrochemical Corporation. Pursuant to the terms of the Transaction Agreement, ChemChina will cause a newly incorporated company that is directly or indirectly controlled by ChemChina (the “Offeror”) to submit a tender offer for all publicly held ordinary shares of Syngenta and American Depositary Shares (“ADSs”) of Syngenta issued by the Bank of New York Mellon as depository (the “ChemChina Tender Offer”).

Pursuant to the terms and conditions of the Transaction Agreement, which was unanimously approved by Syngenta’s Board of Directors, the Offeror will offer the shareholders of Syngenta \$465 per ordinary share. In addition, the Offeror will allow Syngenta to pay a special dividend of CHF 5 per ordinary share conditional upon and prior to closing.

The consummation of the ChemChina Tender Offer is subject to certain customary conditions, including, among others, (i) the valid tender to the Offeror of at least 67 percent in aggregate of the issued ordinary shares of Syngenta (or ADSs representing shares) and (ii) the receipt of required regulatory approvals, including approval by the Committee on Foreign Investment in the United States (“CFIUS”).

ChemChina is required to take all actions and to supply all information necessary to obtain regulatory approvals for the ChemChina Tender Offer unless such actions would (i) result in the reduction of the consolidated sales of one year of \$2.68 billion or more or (ii) in the case of CFIUS, remove all oversight, management and control of ChemChina or all physical and other access of ChemChina to businesses, assets or operations of Syngenta which contributed to consolidated sales of Syngenta of \$1.54 billion or more in financial year 2015.

Syngenta’s Board of Directors has agreed to support the ChemChina Tender Offer and recommend acceptance of the ChemChina Tender Offer to Syngenta shareholders. During the term of the Transaction Agreement, Syngenta may not solicit any third party proposal or transaction. However, Syngenta may, in response to an unsolicited written proposal for all or a majority of the shares that Syngenta’s Board of Directors determines in good faith is more favorable to the holders of Syngenta’s ordinary shares than the ChemChina Tender Offer taking into account all terms and conditions including expense reimbursement provisions, execution risks and closing conditions (a “Superior Proposal”) and after providing ChemChina the opportunity to propose measures to improve the terms of the ChemChina Tender Offer, furnish such third party with information and participate in discussions with such third party. The Board of Directors of Syngenta is not permitted to change its recommendation of the ChemChina Tender Offer, to recommend a third party transaction or to enter into an agreement related thereto, except in connection with a Superior Proposal (that is a firm offer that is fully financed or, to the extent the consideration includes shares, is subject only to required shareholder approval, and that the Board determines is capable of being made and consummated in a reasonable time frame) after providing ChemChina at least five trading days to improve its offer such that ChemChina’s improved offer is as least as favorable to the holders of Syngenta’s ordinary shares as such a Superior Proposal.

Syngenta will pay ChemChina an amount equal to \$1.5 billion if the ChemChina Tender Offer is not successful or does not become unconditional in certain circumstances, including, among others, for a reason attributable to (i) a material breach by Syngenta of the Transaction Agreement, (ii) the withdrawal or modification by Syngenta’s Board of Directors of its recommendation for the ChemChina Tender Offer, (iii) the entry by Syngenta into, or the recommendation by its Board of, an alternative transaction or (iv) the public announcement of an alternative transaction prior to the termination of the Transaction Agreement and Syngenta entering into a definitive agreement relating to such alternative transaction within 12 months of such termination and such alternative transaction being consummated.

ChemChina will pay Syngenta an amount equal to \$3 billion if, despite all other conditions of the ChemChina Tender Offer having been satisfied or are still capable of being satisfied, the ChemChina Tender Offer does not become unconditional and/or is terminated as a result of the failure to obtain Chinese regulatory approvals or antitrust approvals, but not including CFIUS, if not attributable to a breach by Syngenta of any of its respective obligations under the Transaction Agreement.

The Transaction Agreement may be terminated in a limited number of circumstances, including (i) by either party if all conditions are not satisfied by June 30, 2017, and the Swiss Takeover Board no longer requires the ChemChina Tender Offer to remain open, (ii) by either party if the Offeror publicly declares that the ChemChina Tender Offer will not be further pursued or has failed or if the Offeror otherwise withdraws from launching, continuing or settling the ChemChina Tender Offer so long as the Swiss Takeover Board permits the ChemChina Tender Offer not to be launched, no longer to remain open or not to be settled and the party seeking to terminate is not in breach of any provision under the Transaction Agreement that causes any such non-pursuance, failure or withdrawal, (iii) by either party if the other party materially breaches its obligations, or has materially breached representations or warranties under the Transaction Agreement, unless promptly and fully remedied by the breaching party, (iv) by ChemChina if Syngenta enters into a definitive agreement with a third party regarding an alternative transaction or a competing offer has an acceptance rate of more than 10 percent of Syngenta’s ordinary shares, (v) by ChemChina if Syngenta’s Board of Directors (1) fails to recommend the ChemChina Tender Offer to the shareholders of Syngenta or include its recommendation in the Schedule 14D-9 to be filed by Syngenta with respect to the ChemChina Tender Offer, (2) withdraws or adversely modifies its recommendation of the ChemChina Tender Offer or makes an announcement to that effect, or (3) recommends an alternative transaction or makes an announcement to that effect, (vi) by Syngenta if the Board of Directors of Syngenta withdraws or modifies its recommendation of the ChemChina Tender Offer and ChemChina has the right to withdraw the ChemChina Tender Offer or (vii) by Syngenta in the event that all Chinese regulatory approvals (other than antitrust approvals) have not been obtained within 12 weeks after the date of the Transaction Agreement.

Following the execution of the Transaction Agreement, Syngenta is not permitted to pay any dividends other than (i) its ordinary dividend of up to CHF 11 in respect of the financial year 2015 and an ordinary dividend in respect of the financial year 2016 in accordance with Syngenta’s dividend policy in effect as of the date of the Transaction Agreement if the first settlement of the ChemChina Tender Offer has not occurred on the date on which Syngenta is required to dispatch the invitation to the ordinary general meeting of shareholders in 2017 and (ii) a special dividend of CHF 5 payable immediately prior to the closing of the ChemChina Tender Offer. In addition, effective as of the execution of the Transaction Agreement, Syngenta is required to suspend its share buy-back program and any market making or similar arrangements.

Following the closing of the ChemChina Tender Offer, four out of ten members of Syngenta’s Board of Directors will consist of persons who are independent of ChemChina and its affiliates (each, an “Independent Director”). The current Chairman of Syngenta will become the Vice-Chairman of Syngenta’s Board of Directors and lead Independent Director. Following the closing of the ChemChina Tender Offer, certain matters will require the affirmative vote of at least two of Syngenta’s Independent Directors, including, among others, (i) any change in the location of Syngenta’s headquarters, (ii) any raising of new debt or making of distributions which would lower the rating of Syngenta to a level below investment grade (by Moody’s and Standard & Poor’s), (iii) any reduction in Syngenta’s R&D budget below specified thresholds, (iv) any material change in the agricultural sustainability programs or reduction of funding of the Syngenta Foundation for Sustainable Agriculture below specified thresholds and (v) any material change to Syngenta’s Health, Safety and Environment Policy and Standards. The Independent Directors will also be required to approve, subject to certain exceptions, any transaction between any member of the ChemChina group, on the one hand, and any member of Syngenta group, on the other hand, if the transaction is not made at market terms. The above corporate governance matters remain in place until the earlier of (i) five years following the first settlement of the ChemChina Tender Offer and (ii) a re-listing of Syngenta’s ordinary shares through an initial public offering.

The Transaction Agreement is governed by and construed in accordance with the laws of Switzerland.

In connection with the ChemChina Tender Offer, Syngenta will likely incur debt as part of ChemChina’s financing of the acquisition. This may have a negative impact on Syngenta’s credit rating and financing expense. Some of Syngenta’s unsecured notes have change of control provisions. Assuming that Syngenta’s credit rating remains at investment grade levels, Syngenta expects that its unsecured senior notes will remain outstanding and no change of control repurchase offer would be required. However, a change of control likely will trigger a renegotiation of Syngenta’s credit facilities. If any refinancing should prove to be necessary, Syngenta expects it would work with ChemChina to obtain replacement financing.

Quantitative and qualitative disclosure about market risk

For quantitative and qualitative disclosure about market risk, see Item 11.

Appendix A

Reconciliation of non-GAAP measures to equivalent GAAP measures

A non-GAAP measure is a numerical measure of financial performance, financial position or cash flows that either:

- includes, or is subject to adjustments that have the effect of including, amounts that are excluded in the most directly comparable measure calculated and presented under IFRS; or
- excludes, or is subject to adjustments that have the effect of excluding, amounts that are included in the most directly comparable measure calculated and presented under IFRS.

Syngenta uses non-GAAP measures in this report where they are regarded by management as important for the investor to fully understand Syngenta's performance. The non-GAAP measures presented in this report are measures adjusted for exchange rate movements and to exclude restructuring gains and losses, impairment losses and divestment gains and losses. The Company presents these measures because:

- movements in exchange rates historically have had, and in the future are expected to have, a significant impact on sales and operating income from period to period; and
- restructuring and impairment charges historically have fluctuated, and in the future are expected to fluctuate, significantly from period to period and thereby have a volatile impact on results.

Syngenta has been engaged in significant restructuring activities since the formation of the Company in 2000, including programs to integrate and extract synergies from the combined operations of the Zeneca agrochemicals business and the Novartis agribusiness, the integration of business combinations, the Operational Efficiency programs, the implementation of the integrated crop strategy and, beginning in 2014, the AOL program. The incidence of restructuring charges is periodic and volatile, reflecting the timing of irrevocable commitments related to specific sites and operations. Therefore the impact on reported performance varies from period to period and there is limited continuity in the specific composition or size of such charges. Internal financial reporting and management and employee incentive plans are substantially based on financial measures excluding the charges for restructuring and impairment so that management is incentivized to deliver the benefits of the associated restructuring and not to achieve short-term financial targets by deferring implementation of restructuring plans. Restructuring programs typically deliver benefits with a payback over several years, similar to capital investments, and control over restructuring expenditures is performed on a similar project basis to that applied with capital investments.

Syngenta presents non-GAAP measures on operating income before restructuring and impairment at both the segmental and group levels. Restructuring and impairment charges have had a material effect on operating income in the period covered by the review. In the opinion of management, reporting operating performance excluding restructuring and impairment in addition to the GAAP measures provides a more thorough understanding of business performance. Together with disclosure of the material elements within restructuring and impairment and of the overall anticipated size and timeframe of restructuring programs, these measures may assist investors in forecasting future operating performance. In addition to GAAP measures, Syngenta uses measures of operating performance excluding restructuring and impairment in internal reporting to management and the Board of Directors, and these measures are used in the incentive plans for Syngenta management and other employees. Restructuring and impairment charges have been incurred in all the periods covered by the review and are expected to continue to arise and have a material effect on operating performance in future periods. Consequently, non-GAAP measures of operating income before restructuring and impairment do not present a complete picture of operating performance and these measures should be seen only as supplementary to the GAAP measure.

Syngenta presents non-GAAP information on income before taxes excluding restructuring and impairment together with income tax expense before restructuring and impairment to assist investors to calculate the Group tax rate both including and excluding the impact of restructuring and impairment charges. The tax rate on restructuring and impairment charges has been volatile and different from the tax rate on income before taxes excluding restructuring and impairment, due in part to many categories of restructuring or impairment charges not being deductible for tax purposes. In addition to GAAP measures, measures of income before taxes excluding restructuring and impairment and income tax expense excluding restructuring and impairment are used in internal reporting to management and the Board of Directors. Restructuring and impairment charges have been incurred in all the periods covered by the review and are expected to continue to arise and have a material effect on operating performance in future periods. Consequently, non-GAAP measures of income before taxes excluding restructuring and impairment and income tax expense before restructuring and impairment do not present a complete picture of financial performance and these measures should be seen only as supplementary to the GAAP measure.

Syngenta presents non-GAAP information on net income and earnings per share before restructuring and impairment and, where relevant, on net income and earnings per share from continuing operations before restructuring and impairment. As above, restructuring and impairment charges have had a material effect on operating income in the period covered by the review. In the opinion of management, reporting net income and earnings per share excluding restructuring and impairment in addition to the GAAP measures provides a more thorough understanding of business performance. Together with disclosure of the material elements within restructuring and impairment and of the overall anticipated size and timeframe of restructuring programs, this disclosure may assist investors in forecasting future performance. In addition to net income and earnings per share prepared in accordance with GAAP, Syngenta uses net income and earnings per share excluding restructuring and impairment in internal reporting to management and the Board of Directors, and the measure is used in the incentive plans for Syngenta management and other employees. Restructuring and impairment charges have been incurred in all the periods covered by the review and are expected to continue to arise and have a material effect on financial performance in future periods. Consequently, the non-GAAP measures of net income and earnings per share before restructuring and impairment do not present a complete picture of financial performance and these measures should be seen only as supplementary to the GAAP measures.

For improved clarity, the definitions of these non-GAAP measures and reconciliations of non-GAAP measures to the appropriate GAAP measure are provided below. The tables below are included to show the reconciliation of the GAAP measures to the non-GAAP measures used in the report and do not represent income statements prepared under IFRS.

Reconciliation of net income excluding restructuring and impairment (non-GAAP measure) to profit for the period (GAAP measure)

	Total	Restructuring and impairment	Before restructuring and impairment
2015 (\$m, except percentage, share and per share amounts)			
Operating income	1,841	(388)	2,229
Income/(loss) from associates and joint ventures	7	–	7
Financial expense, net	(256)	–	(256)
Income before taxes	1,592	(388)	1,980
Income tax expense	(248)	88	(336)
Net income	1,344	(300)	1,644
Attributable to non-controlling interests	(5)	–	(5)
Net income attributable to Syngenta AG shareholders	1,339	(300)	1,639
Tax rate	16%	23%	17%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
Basic earnings per share	14.57	(3.26)	17.83
Diluted earnings per share	14.52	(3.26)	17.78

	Total	Restructuring and impairment	Before restructuring and impairment
2014 (\$m, except percentage, share and per share amounts)			
Operating income	2,105	(206)	2,311
Income/(loss) from associates and joint ventures	7	–	7
Financial expense, net	(217)	–	(217)
Income before taxes	1,895	(206)	2,101
Income tax expense	(273)	38	(311)
Net income	1,622	(168)	1,790
Attributable to non-controlling interests	(3)	–	(3)
Net income attributable to Syngenta AG shareholders	1,619	(168)	1,787
Tax rate	14%	18%	15%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
Basic earnings per share	17.66	(1.83)	19.49
Diluted earnings per share	17.60	(1.82)	19.42

	Total	Restructuring and impairment	Before restructuring and impairment
2013 (\$m, except percentage, share and per share amounts)			
Operating income	2,086	(179)	2,265
Income/(loss) from associates and joint ventures	48	–	48
Financial expense, net	(200)	–	(200)
Income before taxes	1,934	(179)	2,113
Income tax expense	(285)	38	(323)
Net income	1,649	(141)	1,790
Attributable to non-controlling interests	(5)	–	(5)
Net income attributable to Syngenta AG shareholders	1,644	(141)	1,785
Tax rate	15%	22%	15%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
Basic earnings per share	17.88	(1.53)	19.41
Diluted earnings per share	17.78	(1.52)	19.30

	Total	Restructuring and impairment	Before restructuring and impairment
2012 (\$m, except percentage, share and per share amounts)			
Operating income	2,256	(265)	2,521
Income/(loss) from associates and joint ventures	7	–	7
Financial expense, net	(147)	–	(147)
Income before taxes	2,116	(265)	2,381
Income tax expense	(266)	83	(349)
Net income	1,850	(182)	2,032
Attributable to non-controlling interests	(3)	–	(3)
Net income attributable to Syngenta AG shareholders	1,847	(182)	2,029
Tax rate	13%	31%	15%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
Basic earnings per share	20.16	(1.98)	22.14
Diluted earnings per share	20.05	(1.98)	22.03

	Total	Restructuring and impairment	Before restructuring and impairment
2011 (\$m, except percentage, share and per share amounts)			
Operating income	2,009	(245)	2,254
Income/(loss) from associates and joint ventures	15	–	15
Financial expense, net	(165)	–	(165)
Income before taxes	1,859	(245)	2,104
Income tax expense	(289)	55	(344)
Net income	1,570	(190)	1,760
Attributable to non-controlling interests	(1)	–	(1)
Net income attributable to Syngenta AG shareholders	1,569	(190)	1,759
Tax rate	16%	22%	16%
Number of shares – basic (millions)	92		92
Number of shares – diluted (millions)	92		92
Basic earnings per share	17.07	(2.07)	19.14
Diluted earnings per share	16.98	(2.05)	19.03

Constant exchange rates

Syngenta compares results from one period to another period in this report using variances calculated at constant exchange rates (“CER”). To present that information, current period results for entities reporting in currencies other than US dollars are converted into US dollars at the prior period’s exchange rates, rather than the exchange rates for the current year. See Note 26 to the consolidated financial statements in Item 18 for information on average exchange rates in 2015 and 2014. For example, if a European entity reporting in CHF sold CHF 100 million of products in 2015 and 2014, Syngenta’s financial statements would report \$104 million of revenues in 2015 (using 0.96 as the rate, which was the average exchange rate in 2015) and \$110 million in revenues in 2014 (using 0.91 as the rate, which was the average exchange rate in 2014). The CER presentation would translate the 2015 results using the 2014 exchange rates and indicate that underlying revenues were flat. Syngenta presents this CER variance information in order to assess how its underlying business performed before taking into account currency exchange fluctuations. Syngenta also presents its actual reported results in order to provide the most directly comparable data under GAAP.

ITEM 6 — DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Board of Directors

At December 31, 2015, the Syngenta Board of Directors (the Board) and its Committees are organized as shown below.

Changes announced

The Chairman's & Governance Committee (CGC) and the Nomination Committee (NC) are dissolved at December 31, 2015. The new Board Committee structure at January 1, 2016, comprising a *newly formed* Governance & Nomination Committee as well as the Compensation Committee, the Audit Committee and the Corporate Responsibility Committee and the corresponding topical Committee Charters, are available on the Company's website in the section "About Syngenta/Governance".



For the year ended December 31, 2015

*Michael Mack, former CEO, was an executive member of the Board of Directors, a member of the Chairman's & Governance Committee and the Corporate Responsibility Committee until he stepped down from his functions at Syngenta at October 31, 2015.

Syngenta is led by a strong and experienced Board. It currently includes representatives with seven nationalities, drawn from broad international business and scientific backgrounds. Its members bring diversity in expertise and perspective to the leadership of a complex, highly regulated, global business.

The Board is the highest level of management in the Company and exercises general supervision over the objectives and the conduct of business. In addition, the Board takes an active role in reviewing and enhancing Corporate Governance within Syngenta. The non-transferable and inalienable duties of the Board as defined in the Syngenta Articles of Incorporation are listed below. More detailed information on the duties and competencies of the Board is available in the Regulations Governing the Internal Organization of Syngenta on www.syngenta.com in the section "About Syngenta/Governance".

Responsibilities of the Board of Directors

The Board of Directors (the Board) has the following nontransferable and inalienable responsibilities:

- ultimate direction of the business of the Company and the giving of the necessary directives
- determination of the organization of the Company
- administration of accounting, financial control and financial planning
- appointment and removal of the persons entrusted with the management and representation of the Company
- appointment of an Independent Proxy in cases where the Independent Proxy elected by the General Meeting of Shareholders is not capable of acting
- ultimate supervision of the persons entrusted with the management of the Company, specifically in view of their compliance with the law, the Articles of Incorporation, regulations and directives
- preparation of the Business Report and the Compensation Report and of the General Meeting of Shareholders and the carrying out of the resolutions adopted by the General Meeting of Shareholders
- notification of the court if liabilities exceed assets

- adoption of resolutions concerning the increase of the share capital to the extent that such power is vested in the Board (article 651 paragraph 4 CO), as well as resolutions concerning the confirmation of capital increases and respective amendments to the Articles of Incorporation
- examination of the professional qualifications of the external auditor.

The Board has delegated the authority to manage the Company's operations to the Chief Executive Officer (CEO) and the Executive Committee.

Chairman of the Board of Directors

The Chairman of the Board of Directors (the Chairman) is a non-executive member of the Board. He leads the Board in the exercise of its non-transferable duties, including the ultimate management and oversight of the Company. The Chairman, together with the Chief Executive Officer (CEO), assumes overall responsibility for the development of the Company's strategies and ensures close alignment and common understanding between the Board, its Committees, the CEO and the Executive Committee of such strategies and their implementation. On behalf of the Board, the Chairman exercises ongoing oversight and governance over the CEO and through him also over the Executive Committee. The Chairman oversees the reputation of the Company and, together with the CEO, represents the interests of the Company to important stakeholders and the general public.

Should the Chairman be unable to carry out his duties, the Vice Chairman shall act in his stead.

Functions and mandates of the members of the Board of Directors

The functions and activities performed by the members of the Board of Directors (the Board), apart from their duties as non-executive members of the Board, do not relate significantly to Syngenta or its subsidiaries. Also, none of the non-executive Directors was a member of the management of Syngenta or one of the Company's subsidiaries in the three financial years preceding the reporting year.

The members of the Board may hold no more than the following number of mandates in the supreme executive bodies of companies and organizations:

- up to additional 4 mandates in listed companies
- up to 5 mandates in non-listed companies
- up to 10 mandates in (i) charitable organizations, (ii) associations or foundations and (iii) other non-profit institutions.

Several mandates held in different companies of the same group count as one mandate. Mandates within companies under the direct or indirect control of Syngenta (subsidiaries) or which are not required to be registered in the Swiss Commercial Register or a similar foreign register are not limited by numbers. A short-term temporary overrun of the limitations set forth above by one mandate is permissible.

Election of the members of the Board of Directors and terms of office, constitution of the Board

The members of the Board are elected by the shareholders at the Annual General Meeting (AGM) for a term of one year; re-election is possible. The members of the Board shall automatically retire after the lapse of the 12th year of office or, if earlier, on expiry of the 70th year of age. In each case, retirement becomes effective on the date of the next AGM following such event.

The Chairman of the Board and the members of the Compensation Committee are also elected by the AGM for a one-year term of office; re-election is possible.

In all other respects, the Board constitutes itself. In particular, it elects one Vice Chairman from among its members, appoints the members of the Board Committees (except for the Compensation Committee) and the respective chairpersons, the CEO, the further members of the Executive Committee and the Head Internal Audit. It also designates the Secretary who need not be a member of the Board. The Company Secretary acts as Secretary to the Board.

Members of the Board of Directors

At December 31, 2015

Michel Demaré

Born: August 31, 1956

Nationality: Belgian

Initial appointment: 2012

Functions in Syngenta

Chairman of the Board, non-executive Director

Chairman of the Chairman's & Governance Committee, the Corporate Responsibility Committee and the Nomination Committee

He is also Chairman of the Syngenta Foundation for Sustainable Agriculture.

Professional background

Michel Demaré was Chief Financial Officer and Executive Vice President of ABB from 2005 to February 2013, serving in addition, between late 2008 and March 2011, as the company's President of Global Markets. Between February and September 2008, he was ABB's acting Chief Executive Officer. Previously he had been Chief Financial Officer Europe for Baxter International Inc. He joined Baxter in 2002 after 18 years at the Dow Chemical Company, where he held various treasury and division CFO positions in Europe (including Switzerland) and the USA. Apart from his functions in Syngenta, Michel Demaré is currently holding the following Board memberships:

- Listed companies: Vice Chairman of UBS AG
- Non-listed companies: Member of the Supervisory Board of Louis Dreyfus Commodities Holdings B.V.

In addition, he is a member of the "Beirat Zukunft Finanzplatz" in Bern, a member of the Supervisory Board of IMD Business School in Lausanne and a member of the Advisory Board at the Institute of Banking and Finance at the University of Zurich.

Michel Demaré holds a License in Applied Economics from the Université Catholique de Louvain (UCL) and an MBA from the Katholieke Universiteit Leuven (KUL) in Belgium.

Jürg Witmer

Born: June 22, 1948

Nationality: Swiss

Initial appointment: 2006

Functions in Syngenta

Vice Chairman, non-executive Director

Chairman of the Compensation Committee, member of the Chairman's & Governance Committee and the Nomination Committee

Professional background

Jürg Witmer joined Hoffmann-La Roche in Basel in 1978 and subsequently held a number of positions including Legal Counsel, Assistant to the CEO, General Manager and China Project Manager of Roche Far East based in Hong Kong, Head of Corporate Communications and Public Affairs at Roche headquarters in Basel, Switzerland, and General Manager of Roche Austria. From 1999 to 2005, he acted as Chief Executive Officer of the Givaudan Group in Vernier/Geneva. From 2008 to 2012, he was also Chairman of Clariant AG, Basel. Apart from his functions in Syngenta, Jürg Witmer is currently holding the following Board memberships:

- Listed companies: Chairman of Givaudan Group
- Non-listed companies: Chairman of Interpharma Investments Ltd., Hong Kong, and non-executive Director of A. Menarini IFR Florence.

Jürg Witmer has a doctorate in Law from the University of Zurich, as well as a degree in International Studies from the Graduate Institute of the University of Geneva.

Vinita Bali

Born: November 11, 1955

Nationality: Indian

Initial appointment: 2012

Functions in Syngenta

Non-executive Director

Member of the Corporate Responsibility Committee

Professional background

Vinita Bali started her career in India with the Tata Group, and then joined Cadbury India, subsequently working for Cadbury in the UK, Nigeria and South Africa. From 1994 onwards, she held a number of senior positions in marketing and general management at The Coca-Cola Company in the USA and Latin America, becoming Head of Corporate Strategy in 2001, and then joined the Zyman Group as Head of its Business Strategy practice in the USA in 2003. From 2005 to 2014 Vinita Bali was the Managing Director of Britannia Industries, India's publicly listed premier food company. She recently stepped down from this executive function to pursue a variety of roles in the corporate and development sectors. These include, apart from her functions in Syngenta, the following Board memberships:

- Listed companies: Non-executive Director of Titan Industries, CRISIL and Smith & Nephew PLC
- Non-listed companies: Chairman of GAIN (Global Alliance for Improved Nutrition), Vice Chairman of CARE India Solutions for Sustainable Development and a non-executive Director of Katsuri & Sons Ltd.

She also holds Advisory or Governing Board mandates in several institutions in the development sector.

Vinita Bali holds an MBA from The Jamnalal Bajaj Institute of Management Studies, University of Bombay and a Bachelor degree in Economics from the University of Delhi.

Stefan Borgas

Born: September 11, 1964

Nationality: German

Initial appointment: 2009

Functions in Syngenta

Non-executive Director

Member of the Audit Committee

Professional background

Stefan Borgas has been President and Chief Executive Officer of Israel's ICL Group since September 2012. Prior to this he was CEO of Lonza Group from June 2004 to January 2012 after having spent 14 years with BASF Group where he held various leadership positions in Fine Chemicals and Engineering Plastics in the USA, Germany, Ireland and China. Stefan Borgas is a member of the Board of the German-Israeli Chamber of Commerce and of the International Fertilizer Industry Association (IFA). Apart from the above, he holds no other mandates in the supreme executive bodies of listed or non-listed companies.

Stefan Borgas holds a degree in Business Administration from the University of Saarbrücken and an MBA from the University of St. Gallen.

Gunnar Brock

Born: April 12, 1950

Nationality: Swedish

Initial appointment: 2012

Functions in Syngenta

Non-executive Director

Chairman of the Audit Committee and member of the Nomination Committee

Professional background

Gunnar Brock worked for the Tetra Pak Group for many years, with spells in Asia, Australia and Europe, returning – after a period as President and Chief Executive Officer of Alfa Laval – to become President and Chief Executive Officer of the Tetra Pak Group, headquartered in Switzerland. From 2002 to 2009 he served as President and Chief Executive Officer of the Atlas Copco Group. Apart from his functions in Syngenta, Gunnar Brock is currently holding the following Board memberships:

- Listed companies: Chairman of Stora Enso, non-executive Director of Investor AB, non-executive Director of Total SA
- Non-listed companies: Chairman of Mölnlycke Health Care and non-executive Director of Patricia Industries (both 100% affiliates of Investor AB), and non-executive Director of Stena AB.

Gunnar Brock holds an MBA from the Stockholm School of Economics.

Eleni Gabre-Madhin

Born: July 12, 1964

Nationality: Swiss

Initial appointment: 2013

Functions in Syngenta

Non-executive Director

Member of the Corporate Responsibility Committee

Professional background

Eleni Gabre-Madhin is the co-founder and CEO of eleni LLC, which supports the formation of commodity exchanges across Africa, helping to promote food security. She also founded and was CEO of the Ethiopia Commodity Exchange. Previously, she was a Senior Program Leader for Strategy issues at the International Food Policy Research Institute in Addis Ababa and worked for several institutions, such as the World Bank in Washington (2003–2004). Apart from her functions in Syngenta, she holds no other mandates in the supreme executive bodies of listed or non-listed companies.

Eleni Gabre-Madhin holds a BA in Economics from Cornell University, a Master of Science in Agricultural Economics from Michigan State University and a PhD in Applied Economics (Food Research Institute) from Stanford University. She received the Outstanding Dissertation Award from the American Agricultural Economics Association for her research on grain markets in Ethiopia.

David Lawrence

Born: March 9, 1949

Nationality: British

Initial appointment: 2009

Functions in Syngenta

Non-executive Director

Member of the Audit Committee

He is also Chairman of the Science and Technology Advisory Board.

Professional background

David Lawrence was Head Research & Development at Syngenta from 2002 to 2008. Prior to this role, David Lawrence was Head Research & Technology Projects (2000–2002) for Syngenta. Prior to this, he was Head International R&D Projects for Zeneca Agrochemicals, having previously held several senior scientific roles. Apart from his functions in Syngenta, David Lawrence is currently a non-executive Director of Spectrum Limited (non-listed company). Besides, he is also a Director of the UK Knowledge Transfer Network Ltd., a member of the UK Industrial Biotechnology Leadership Forum, the UK Agri-Tech Strategy Leadership Council, and the Nuffield Council on Bioethics.

David Lawrence graduated in Chemistry from Oxford University with an MA and DPhil in Chemical Pharmacology.

Eveline Saupper

Born: October 1, 1958

Nationality: Swiss

Initial appointment: 2013

Functions in Syngenta

Non-executive Director

Member of the Compensation Committee

Professional background

Eveline Saupper was a partner at the commercial law firm Homburger AG in Zurich until June 2014. Since then, she has been Of Counsel at this law firm. Before joining Homburger in 1985, she worked as a tax specialist with Peat Marwick Mitchell (today KPMG) in Zurich (1983–1985). Apart from her functions in Syngenta, Eveline Saupper is currently holding the following Board memberships:

- Listed companies: Non-executive Director of Bâloise Holding AG, Flughafen Zürich AG and Georg Fischer AG
- Non-listed companies: Chairman of Mentex AG, non-executive Director of hkp group AG and Stäubli Holding AG.

Eveline Saupper holds a degree and PhD in Law from the University of St. Gallen. She is admitted to the Bar of Zurich and is a certified tax expert.

Jacques Vincent

Born: April 9, 1946

Nationality: French

Initial appointment: 2005

Functions in Syngenta

Non-executive Director

Member of the Compensation Committee

Professional background

Jacques Vincent began his career with Danone in 1970 where he held various financial and overall management positions within this Group. Among others he was Vice Chairman and Chief Operating Officer from 1998 to 2008 and held various Board positions between 1997 and 2014. Apart from his functions in Syngenta, Jacques Vincent holds no other mandates in the supreme executive bodies of listed or non-listed companies.

Jacques Vincent is a graduate engineer of the Ecole Centrale, Paris. He holds a Bachelor in Economics from Paris University and a Master of Science from Stanford University.

Meetings of the Board of Directors

The Board of Directors (the Board) meets as often as business requires, however not less than once a quarter. The Chairman defines the agenda of the Board meetings in coordination with the CEO. Any member of the Board may request the convening of a meeting or the inclusion of items of business in the agenda. In 2015, apart from the Board meetings, Board members conducted discussions with officers of the Company to review relevant matters at hand, visited operating locations of the Company and provided information to the management as needed.

In 2015, the Board met as follows:

Members	Meetings attended ¹
Michel Demaré, Chairman	14
Jürg Witmer, Vice Chairman	13
Michael Mack, CEO ²	10 ²
Vinita Bali	13
Stefan Borgas	14
Gunnar Brock	13
Eleni Gabre-Madhin	12
David Lawrence	14
Eveline Saupper	13
Jacques Vincent	13

¹ 14 meetings held in 2015; average length of the meetings: 3.5 hours

² Michael Mack, CEO and executive member of the Board, stepped down from his functions at Syngenta at October 31, 2015

Board Committees

Some of the Board's powers and duties are delegated to the Board Committees. Until December 31, 2015, these were the Chairman's & Governance Committee, the Compensation Committee, the Audit Committee, the Nomination Committee and the Corporate Responsibility Committee.

Changes announced

Upon decision of the Board of December 8, 2015, as of January 1, 2016, the Board will delegate certain powers and duties to a *newly formed* Governance & Nomination Committee, to the Compensation Committee, the Audit Committee and the Corporate Responsibility Committee. The members of new Governance & Nomination Committee are Michel Demaré (Chairman), Jürg Witmer and Gunnar Brock.

The topical Board Committee charters are available on the Company's website, in the section "About Syngenta/Governance".

All Board Committees meet on a regular basis. Their members are provided with the materials necessary to fulfill their duties and responsibilities, and to submit full reports to the Board. The key accountabilities of the Board Committees at December 31, 2015, were the following:

Chairman's & Governance Committee (CGC)¹**Main Responsibilities**

- acts on behalf of the Board in delegated matters and in cases of urgency
- within defined financial limits, decides on
 - o acquisition or divestments of shares or other equity instruments in other companies, of businesses or of third party assets
 - o the establishment of new legal entities and equity joint ventures
 - o the institution and settlement of legal proceedings
- decides on defined financial measures, such as the proposals to the Annual General Meeting on share capital transactions, the issuance and cancellation of negotiable securities by the Company, the entering into or the early termination of long-term financing by third parties, etc.
- proposes the nominations of all members of the Executive Committee, except for the CEO, for appointment by the Board
- reviews issues of corporate governance affecting the Company, including the appropriateness and effectiveness of the Board Committee structure and composition.

The Chairman's & Governance Committee consists of three members: the Chairman, the CEO and one independent, non-executive member of the Board. The Group General Counsel acts as Secretary to the Chairman's & Governance Committee.

Members	Meetings attended²
Michel Demaré, Chairman	3
Jürg Witmer	3
Michael Mack ³	3 ³

1 The Chairman's & Governance Committee (CGC) and the Nomination Committee (NC) are dissolved at December 31, 2015. The new Board Committee structure at January 1, 2016, comprising a newly formed Governance & Nomination Committee as well as the Compensation Committee, the Audit Committee and the Corporate Responsibility Committee and the corresponding topical Committee Charters, are available on the Company's website in the section "About Syngenta/Governance"

2 3 meetings held in 2015; average length of the meetings: 2 hours

3 Michael Mack, CEO and executive member of the Board, stepped down from his functions at Syngenta at October 31, 2015

Compensation Committee (CC)

Main Responsibilities

- reviews and recommends to the Board the compensation principles, strategy and policies which define the compensation system
- defines the elements and the structure of the compensation system, including the structure of share ownership plans
- reviews and recommends to the Board on an annual basis a proposal for approval by the Annual General Meeting of Shareholders of the total compensation of the Board and the Executive Committee
- pursuant to article 29 of the Articles of Incorporation, sets or amends the compensation packages of the members of the Executive Committee and prepares a proposal to the Board to set or amend the compensation package of the CEO
- prepares and recommends to the Board the Compensation Report for approval.

Further information is available in the 2015 Syngenta Compensation Report and in the charter of the Compensation Committee on the Syngenta website in the section "About Syngenta/Governance".

The Compensation Committee consists of a minimum of three independent, non-executive members of the Board¹; the Chairman shall not be a member of the Compensation Committee. The Head of Human Resources acts as Secretary to the Compensation Committee.

Members	Meetings attended²
Jürg Witmer, Chairman	4
Eveline Saupper	4
Jacques Vincent	4

1 The Chairman and the CEO are standing guests, except when issues regarding their own positions are discussed

2 4 meetings held in 2015; average length of the meetings: 1 hour

Audit Committee (AC)
Main Responsibilities

- assists the Board in fulfilling its supervisory responsibilities with respect to accounting and financial reporting practices of the Company
- monitors the performance of the external auditor, checking its independence and coordinating its work with internal audit
- monitors the implementation of findings of external and internal auditors by management
- assesses the quality of the financial reporting and prepares Board decisions in this area
- monitors the effectiveness of the financial compliance framework and of the internal controls environment.

The Audit Committee consists of at least three independent, non-executive members of the Board; the Chairman shall not be a member of the Audit Committee. A member of the Corporate Legal Department currently acts, as a delegate of the Group General Counsel, as Secretary to the Audit Committee.

Members	Meetings attended¹
Gunnar Brock, Chairman	5
Stefan Borgas	5
David Lawrence	5

¹ 5 meetings held in 2015; average length of the meetings: 2 hours. The external auditor attended all meetings in 2015

Nomination Committee (NC)¹
Main Responsibilities

- supports the Board in identifying and selecting succession candidates for the Board members and the CEO
- reviews at least once per year the succession plans for Executive Committee members
- reviews at least once per year the independence of the Board
- prepares and manages the process of self-assessment of the Board regarding its own performance and effectiveness, retaining external support as appropriate.

The Nomination Committee consists of the Chairman and two independent, non-executive members of the Board.

Members	Meetings attended²
Michel Demaré, Chairman	3
Jürg Witmer	3
Gunnar Brock	3

¹ The Chairman's & Governance Committee (CGC) and the Nomination Committee (NC) are dissolved at December 31, 2015. The new Board Committee structure at January 1, 2016, comprising a newly formed Governance & Nomination Committee as well as the Compensation Committee, the Audit Committee and the Corporate Responsibility Committee and the corresponding topical Committee Charters, are available on the Company's website in the section "About Syngenta/Governance"

² 3 meetings held in 2015; average length of the meetings: 2.5 hours

Corporate Responsibility Committee (CRC) Main Responsibilities

- reviews and advises the Board on overall Corporate Responsibility priorities, policies and issues
- acts as custodian of the Board in all Corporate Responsibility matters and exercises oversight over the Executive Committee in this respect
- assesses the effectiveness of the implementation of Corporate Responsibility related internal policies.

The Corporate Responsibility Committee consists of the Chairman, at least two further independent, non-executive members of the Board, and the CEO. The Group General Counsel acts as Secretary to the Corporate Responsibility Committee.

Members	Meetings attended ¹
Michel Demaré, Chairman	2
Michael Mack ²	1 ²
Vinita Bali	2
Eleni Gabre-Madhin	2

¹ 2 meetings held in 2015; average length of the meetings: 2 hours

² Michael Mack, CEO and executive member of the Board, stepped down from his functions at Syngenta at October 31, 2015

Information and control instruments of the Board of Directors

The Board recognizes the importance of being fully informed on material matters that impact Syngenta. It supervises management and monitors its performance through reporting and controlling processes and through the Board Committees. It ensures that it has sufficient information to make the appropriate decisions through the following means:

- All members of the Executive Committee are regularly invited to attend Board meetings to report on their areas of responsibility, including key data for the core businesses, financial information, existing and potential risks, and updates on developments in important markets. Other members of management attend Board meetings as deemed necessary by the Board.
- At each Board meeting, the CEO reports on the meetings of the Executive Committee. The Chairman receives the minutes of the Executive Committee meetings; on request, the minutes are available to all members of the Board.
- Board Committees regularly meet as appropriate with members of management, external advisors and the external auditor.
- Important information is regularly sent to the Board.

Risk management

Risk management is of highest importance at Syngenta; responsibility for it is assumed by the Board and, within the scope of its duties, by every individual Board committee including the Audit Committee.

A Risk Management Policy sets out global standards for Syngenta and guidelines on how risks are to be identified, classified and managed throughout the business.

The businesses and functions review their risks on a regular basis and decide on how these have developed and how they need to be classified and treated going forward. Specialized functions such as Group Finance, Health Safety & Environment, Corporate Security, Legal & Compliance and many others support the business in managing risks in their respective areas. Group risks can be broadly categorized into financial, operational, legal, compliance, regulatory and strategic risks.

Group Risk Management at Syngenta collects information on all identified risks from businesses and functions on a regular basis and facilitates an assessment process by making its own assessment and challenging the teams as appropriate. Risks are described and tracked on a dedicated Risk Management Information System.

Group Risk Management reports Syngenta's Risk Profile to Syngenta's Global Compliance and Risk Management Committee (CRMC), which in turn reports to the Syngenta Executive Committee and the Board of Directors.

Audit

Internal Audit

Internal Audit, as an independent function, carries out control, operational and system audits. All subsidiaries are within the scope of Internal Audit. Audit plans are reviewed and approved by the Audit Committee, and any suspected irregularities noted during audits are reported without delay. Internal Audit reports on issues arising from internal audits to the Audit Committee and shares reports with the external auditor.

External auditor

The external auditor is accountable to the Audit Committee, the Board and ultimately to the shareholders. At the completion of the audit, the external auditor presents and discusses the audit reports on the financial statements and internal controls with the Audit Committee, highlighting the significant accounting, control and auditing matters addressed during the course of the audit. The external auditor attends all Audit Committee meetings and at least once a year the external auditor takes part in a meeting with the Board.

Duration of the mandate and term of office of the lead auditor

KPMG AG was initially elected as external auditor at the Annual General Meeting in April 2014. The appointment is for one year and can be renewed annually. The auditor in charge may serve for no more than five years. The current auditor in charge, Richard Broadbelt, has served for two business years (2014–2015).

Board of Directors oversight over external audit

The Audit Committee, on behalf of the Board, is responsible for monitoring the performance of the external auditor and verifying its independence. In addition, the Audit Committee monitors the implementation of findings of the external auditor by the management. The Audit Committee also considers and makes recommendations on the appointment, reappointment or removal of the external auditor to the Board, which then nominates the external auditor for election by the Annual General Meeting. As an additional duty, the Audit Committee authorizes non-audit services of the external auditor permitted under any of the listing or other rules applicable to Syngenta. The CFO and the Group Financial Controller are generally invited to the meetings of the Audit Committee; the external auditor, the Head Internal Audit and other members of management may also be invited as appropriate. The Chairperson of the Audit Committee reports orally to the Board after each meeting on the work performed by the Committee, its findings and actions undertaken.

Executive Committee

Under the leadership of the Chief Executive Officer (CEO), the Executive Committee is responsible for the active leadership and the operative management of the Company. It consists of the CEO, the Chief Operating Officer (COO) EAME & Latin America, the Chief Operating Officer (COO) APAC & North America, the Chief Financial Officer (CFO), the Head Research & Development, the Head Global Operations, the Head Legal & Taxes, the Head Human Resources and the Head Corporate Affairs.

Michael Mack, CEO and executive Director since 2008, stepped down from his functions at Syngenta at October 31, 2015. John Ramsay, CFO, has since been acting as CEO ad interim.

Members of the Executive Committee

Members	Functions
John Ramsay	Chief Executive Officer (CEO) <i>ad interim</i> and Chief Financial Officer (CFO)
Caroline Luscombe	Head Human Resources
Christoph Mäder	Head Legal & Taxes and Company Secretary
Patricia Malarkey	Head Research & Development
Jonathan Parr	Chief Operating Officer (COO) EAME & Latin America
Mark Peacock	Head Global Operations
Davor Pisk	Chief Operating Officer (COO) APAC & North America
Jonathan Seabrook	Head Corporate Affairs

At January 31, 2016

Responsibilities of the Executive Committee

The duties of the Executive Committee comprise in particular:

- formulation of the fundamentals of corporate policy
- designing the Company's strategy and strategic plans for the approval of the Board of Directors (the Board)
- implementation of the strategies, strategic plans and the periodic assessment of the attainment of goals
- submission of regular reports for the attention of the Board or its Committees
- personnel appointments within its own area of authority and any modifications to the organization
- promotion of a modern and active leadership culture
- provision and optimal utilization of resources (finances, management capacity)
- establishment of an active communications policy within and outside the Company
- systematic selection, development and promotion of new and potential management personnel
- examination and approval of significant agreements with third parties and business activities involving extraordinary high risks
- establishment of guidelines for planning, organization, finance, reporting, information and other technology, etc.

Chief Executive Officer (CEO)

The CEO is nominated by the Board; he shares responsibility for the strategic direction of the Company with the Chairman. The CEO and the Executive Committee are jointly responsible for the active leadership and operative management of the Company. The CEO leads the Executive Committee. Members of the Executive Committee are directly responsible to the CEO. The CEO, together with the Chairman, manages the reputation of the Company, and represents the interests of the Company to important stakeholders and the general public.

Duration of employment contracts and mandates

Employment contracts with members of the Executive Committee are concluded for an indefinite term. The maximum notice period for the CEO and all members of the Executive Committee is 12 months.

The members of the Executive Committee, subject to the approval by the Chairman of the Board, may hold no more than the following number of mandates in the supreme executive bodies of companies and organizations:

- up to 2 mandates in listed companies
- up to 2 mandates in non-listed companies
- up to 4 mandates upon instruction of Syngenta in companies that are not directly or indirectly controlled by Syngenta
- up to 10 mandates in (i) charitable organizations, (ii) associations or foundations and (iii) other non-profit institutions.

Several mandates held in different companies of the same group count as one mandate. Mandates within companies under the direct or indirect control of Syngenta (subsidiaries) or which are not required to be registered in the Swiss Commercial Register or a similar foreign register are not limited by numbers.

Executive Committee

At January 31, 2016

John Ramsay

Born: October 3, 1957

Nationality: British

Appointment: 2007

Functions in Syngenta

Chief Executive Officer *ad interim* (since November 2015), Chief Financial Officer

Professional background

John Ramsay was Group Financial Controller (2000–2007) for Syngenta. Prior to that, he was Zeneca Agrochemicals Finance Head Asia Pacific (1994–1999), Financial Controller ICI Malaysia (1990–1993), and ICI Plant Protection Regional Controller Latin America (1987–1990). Before joining ICI in 1984, he worked in Audit and Tax at KPMG. John Ramsay holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He is a Chartered Accountant and also holds an honors degree in Accounting.

Caroline Luscombe

Born: February 28, 1960

Nationality: British

Appointment: 2012

Function in Syngenta

Head Human Resources

Professional background

Caroline Luscombe joined Syngenta as Head of Human Resources in January 2010. Prior to this, she held several senior HR functions in the GE group, namely Head HR for GE Capital Global Banking (2009), HR Leader for GE Money and GE Money EMEA (2006–2008), HR Leader for GE Healthcare Bio-Sciences (2004–2006) and, before its acquisition by GE, Executive Vice President HR for Medical Diagnostics, Amersham plc (2001–2004). From 1997 to 2001, she worked in the chemical sector for Laporte plc and was promoted to Head of HR in 2000. She also held senior HR functions in Rhone-Poulenc Rorer (formerly Fisons plc, 1995–1996) and Tiphook plc (1989–1995). She started her career in finance at Arthur Young McClelland Moore and was UK controller and Compensation and Benefits manager for the strategy consultants Bain & Company (1983–1989). Caroline Luscombe holds no other mandates in the supreme executive bodies of listed or non-listed companies.

She holds a Bachelor degree in German from University College, London.

Christoph Mäder

Born: July 21, 1959

Nationality: Swiss

Appointment: 2000

Functions in Syngenta

Head Legal & Taxes and Company Secretary

Professional background

Christoph Mäder was Head of Legal & Public Affairs for Novartis Crop Protection (1999–2000) and Senior Corporate Counsel for Novartis International AG (1992–1998). He is Vice Chairman of economiesuisse, the main umbrella organization representing Swiss economy. He is also a member of the Board of scienceindustries, the association of Swiss chemical, pharmaceutical and biotech industries, a member of the Board of the Basel Chamber of Commerce and a member of the Executive Board of the Business and Industry Advisory Committee (BIAC) to the Organization for Economic Co-operation and Development (OECD). Christoph Mäder holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He graduated from Basel University Law School, and is admitted to the Bar in Switzerland.

Patricia Malarkey

Born: November 23, 1965

Nationality: British/American

Appointment: 2014

Function in Syngenta

Head Research & Development

Professional background

Prior to her current function as Head Research & Development, Patricia Malarkey was Head Research & Development for Lawn & Garden at Syngenta (2012–2013). Before that, she held a number of senior scientific functions in Crop Protection, Seeds and Biotechnology at Syngenta in Europe and the United States. Patricia Malarkey holds no other mandates in the supreme executive bodies of listed or non-listed companies.

She graduated from the University of Glasgow in Agricultural Chemistry and holds a master's degree in Toxicology from the University of Surrey.

Jonathan Parr

Born: February 27, 1961

Nationality: British

Appointment: 2015

Function in Syngenta

Chief Operating Officer (COO) EAME & Latin America

Professional background

Prior to his current function as Chief Operating Officer, Jonathan Parr was Head of Global Crops & Assets for Syngenta in 2014. Before that, he was Regional Director for EAME (2009–2013), Head of Syngenta Flowers (2007–2008), Head of Marketing and Strategy (2004–2007) and European Manufacturing Manager (2000–2003). Before joining Syngenta, he worked for AstraZeneca as a Factory Manager (1998–2000), Global Product Manager Fungicides (1996–1998) and Supply Chain Project Manager (1994–1996). From 1987 to 1994, he held Project and Engineering Management functions at Imperial Chemical Industries (ICI). Apart from his function in Syngenta, Jonathan Parr holds no other mandates in the supreme executive bodies of listed or nonlisted companies.

Jonathan Parr is a Chartered Engineer and also holds an honors Bachelor degree in Civil Engineering from the University of Southampton as well as a Master in Management from the University of McGill, Canada, and a diploma in International Management from the INSEAD Institute.

Mark Peacock

Born: February 2, 1961

Nationality: British

Appointment: 2007

Function in Syngenta

Head Global Operations

Professional background

Mark Peacock was previously Head of Global Supply (2003–2006) and Regional Supply Manager for Asia Pacific (2000–2003) for Syngenta. Prior to this he was a Product Manager in Zeneca Agrochemicals and General Manager of the Electrophotography Business in Zeneca Specialties. Mark Peacock holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He has a degree in Chemical Engineering from Imperial College, London, and a Master in International Management from McGill University in Montreal.

Davor Pisk

Born: March 16, 1958

Nationality: British

Appointment: 2008

Function in Syngenta

Chief Operating Officer (COO) APAC & North America

Professional background

Prior to his current function as Chief Operating Officer Syngenta, Davor Pisk was Chief Operating Officer for Syngenta Seeds from 2008 to February 2011. Prior to that, he was Region Head Crop Protection Asia Pacific (2003–2007) for Syngenta and Region Head Asia for Zeneca Agrochemicals (1998–2001). Prior to 1998, he was Head of Herbicides for Zeneca (1993–1997) and General Manager of ICI Czechoslovakia (1991–1993). Davor Pisk holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He has a BA in Economics and Politics from Exeter University and an MA in Political Science from the University of California.

Jonathan Seabrook

Born: December 24, 1969

Nationality: British

Appointment: 2013

Function in Syngenta

Head Corporate Affairs

Professional background

Prior to his current function, Jonathan Seabrook was Head Investor Relations Syngenta (2003–2007). Before joining the Company, he held a number of functions in the pharmaceutical and financial services industries, including Glaxo, SmithKline Beecham, N.M. Rothschild & Sons and Bank of America, in both the UK and the USA. Jonathan Seabrook holds no other mandates in the supreme executive bodies of listed or non-listed companies.

He graduated from Exeter University with a degree in Ancient History and is a member of the Chartered Financial Analyst Society.

Management contracts

Syngenta has not entered into management contracts with any third party.

Service contracts / Change of control

The employment agreements of members of the Executive Committee, including the CEO, and the agreements of the members of the Board of Directors, including the Chairman, do not have any change of control clauses. Neither the Executive Committee nor the Board of Directors agreements contain any provisions for termination payments (“golden parachute” or “handshake” or similar arrangements) with regard to severance or other termination events.

Relationships and arrangements involving Directors or members of the Executive Committee

None of the above Directors or members of the Executive Committee has any family relationship with any other Director or member of the Executive Committee. There were no arrangements or understandings with major shareholders, customers, suppliers or others, pursuant to which any of the above Directors or of the Executive Committee members was selected as a Director or as member of the Executive Committee.

Employees of Syngenta

2015

Syngenta had approximately 28,400 permanent employees as of December 31, 2015. Approximately 15 percent of these were in North America, 18 percent in Latin America, 22 percent in Asia Pacific and the remaining 45 percent in Europe, Africa and Middle East.

The functional distribution of Syngenta employees for the year ended December 31, 2012 was approximately as follows:

Production	39%
Research and development	19%
Marketing and distribution	27%
Administration and general overhead	15%

The number of temporary employees varies greatly during each year due to the seasonal nature of the business. During 2015, the highest level of temporary employees was approximately 4,700.

In several countries, part of the workforce is unionized or represented by works councils. Syngenta's relationships with its unions and other employee organizations are generally good and there have been no significant industrial disputes over the past five years at any of Syngenta's major business locations.

2014

Syngenta had approximately 29,000 permanent employees as of December 31, 2014. Approximately 16 percent of these were in North America, 17 percent in Latin America, 22 percent in Asia Pacific and the remaining 45 percent in Europe, Africa and Middle East.

The functional distribution of Syngenta employees for the year ended December 31, 2014 was approximately as follows:

Production	38%
Research and development	20%
Marketing and distribution	30%
Administration and general overhead	12%

During 2014, the highest level of temporary employees was approximately 5,000.

2013

Syngenta had approximately 29,000 permanent employees as of December 31, 2013. Approximately 16 percent of these were in North America, 18 percent in Latin America, 21 percent in Asia Pacific and the remaining 45 percent in Europe, Africa and Middle East.

The functional distribution of Syngenta employees for the year ended December 31, 2013 was approximately as follows:

Production	39%
Research and development	19%
Marketing and distribution	29%
Administration and general overhead	13%

During 2013, the highest level of temporary employees was approximately 5,400.

Share ownership

The aggregate amount of Syngenta shares and share options held by current Directors and the members of the Executive Committee as of December 31, 2015, based on information available to the Company, is 0.36 percent of all outstanding shares, i.e. none of Syngenta's Directors or the Executive Committee members individually owns more than one percent of the Company's outstanding shares. For more information on Syngenta shares and share options owned by individual Directors and by individual members of the Executive Committee see "Compensation Report, 2015 Holding of shares and options".

For a description of arrangements involving Syngenta's employees in the capital of the Company, see Note 23, "Employee share participation plans", to the consolidated financial statements in Item 18.

Compensation

Compensation elements

Syngenta's total compensation package includes:

- fixed compensation – base salary
- variable compensation – short-term incentive plans and, for selected leaders, long-term incentive plans
- benefits (including all insured benefits and retirement/pension plans).

Fixed compensation

Fixed compensation is represented as annual base salary paid in cash, typically on a monthly basis and set by reference to the:

- size and scope of the job
- external market value of the job
- skills, experience and performance of the employee.

To ensure market competitiveness, base salaries are subject to review every year by considering factors such as Company affordability, benchmark data, external market movement, economic environment and individual performance.

In addition, certain employees may receive customary cash allowances for expenses.

Variable compensation

Variable compensation consists of short-term incentives and, for selected leaders, long-term incentives. Target variable compensation is determined by the work level and scope of the individual's job, as well as the external market value of the respective job and the location. The actual payment is dependent on business performance and individual performance. It may be granted in cash, shares, restricted stock units, performance stock units and/or stock options.

All of the variable compensation plans are governed by their own set of regulations which include leaver provisions.

The various short- and long-term incentive plans are summarized in the table below with more detail in the following sections.

Fixed and variable compensation

	Chairman of the Board	Members of the Board	Executive Committee	Senior Management	All Employees	Description	Link to compensation principles
Fixed compensation	•	•	•	•	•	Cash – all employees. The Chairman of the Board and other members of the Board may opt for cash and/or shares	Attract and retain high-quality employees. Provided for ongoing performance and delivery in position
Short-Term variable compensation							
Short-Term Incentive			•	•	•	Cash – all employees	Performance-based compensation. Provided to focus and reward employees on annual company/team and /or individual performance
Sales Incentive Plan					•	Cash – selected employees within the commercial function	
Long-Term variable compensation							
Deferred Share Plan			•	•		Deferred share awards or shares and matching shares ¹	An opportunity to turn short-term incentive into long-term equity. Provided to focus leaders on sustainable value creation and increase their alignment with shareholders
Executive LTI Plan			•			Stock options and PSUs ²	Rewards leadership, innovation and performance. Provided to focus leaders on sustainable business performance and alignment with shareholders
LTI Plan				•		Stock options and RSUs ³	
Employee Share Purchase Plan (ESPP) ⁴				•	•	Plan for all Switzerland-based Syngenta employees: share purchase up to CHF 5,000.– p.a. at 50 percent discount rate ⁵	Identification and commitment to Syngenta

1 In Switzerland, employees are offered a choice of share awards or shares under the DSP. In all other countries, employees receive share awards. For the purposes of this report, both are referred to as “share awards”

2 Performance Stock Units

3 Restricted Stock Units

4 Since 2015, Executive Committee members are not eligible to participate in the ESPP

5 Other Employee Share Purchase Plans providing different discounted share purchase options for employees are also established in 37 other countries

Short-Term Incentive (STI)

The target STI is set as a percentage of base salary which varies by work level as shown in the table below:

	STI targets (as a percentage of base salary)
Chief Executive Officer	80%
Executive Committee	70%
Senior Management ¹	30%–40%
Management ¹	25%

¹ Higher target percentages apply to managers and senior managers in the USA

Both the individual and financial percentage awards can range from zero to 200 percent of the STI target as outlined in the Articles of Incorporation (Article 29, 10). The STI payout is limited to two times the target award.

STI design for Executive Committee members

For Executive Committee members, emphasis is placed on the achievement of financial results. Financial performance measures determine 70 percent of the STI award, while 30 percent is based on individual performance. The financial performance measure consists of earnings per share (EPS) (55 percent) and cash flow return on investment (CFROI) of the Group (15 percent). Individual performance is measured against goals set within the performance management process.

In addition, the STI payout is contingent upon the annual Group Net Income (GNI) reaching a threshold of 85 percent of the target budget.

STI design for managers and employees below the Executive Committee

For managers and employees below the Executive Committee, the STI award weights equally Company financial results and individual performance. Financial performance is determined primarily on the basis of full year business contribution versus budget and further key performance indicators including market share, progressive improvement in business quality, price increases, foreign exchange mitigation and inventory management.

Individual performance is measured in the same way as for Executive Committee members.

STI payout determination

At the end of the calendar year both Company and individual performance are assessed, and actual achievement is compared with the targets and goals set at the beginning of the year. The assessment of financial performance is formula-driven, i.e. actual achievement against target determines the STI percentage award. The assessment of individual performance results in a performance rating which is used to determine an individual percentage award for STI purposes.

Deferred Share Plan (DSP)

The DSP is used to convert part of the annual cash-based STI into a three-year equity based plan and is offered to around 350 participants globally.

It requires a mandatory percentage of the STI to be deferred into Syngenta share awards with a vesting period of three years thereby exposing participants fully to the share value development over this period. A participant may voluntarily defer a further portion of the STI into share awards. In return, Syngenta matches each deferred share award on a one-for-one basis, thus doubling the total number of shares received by the participant. The matching of the share awards is subject to continued employment with Syngenta at the end of the three-year vesting period. The mandatory and voluntary percentages vary by work level as shown in the table below:

STI subject to deferral	Mandatory	Voluntary	Maximum
Chief Executive Officer	40%	40%	80%
Executive Committee	40%	40%	80%
Senior Management	10%–30%	20%–40%	50%
Management	0%	20%	20%

The number of share awards is calculated based on the closing share price at grant date and the amount of STI deferred (mandatory plus any voluntary amount). The calculation is made by applying the following formula:

$$\text{Number of DSP awards} = \frac{\text{Mandatory deferral \%} \times \text{STI award}}{\text{Closing share price at grant}} + \frac{\text{Voluntary deferral \%} \times \text{STI award}}{\text{Closing share price at grant}}$$

Long-Term Incentive (LTI) Plans

The target LTI is set as a percentage of base salary which varies by work level as shown in the table below:

	LTI target (as a percentage of base salary)
Chief Executive Officer	140%
Executive Committee	100%
Senior Management ¹	25%–40%
Management ¹	20%

¹ Higher target percentages apply to managers and senior managers in the USA

The actual LTI granted to a participant is their target LTI multiplied by an individual percentage, which is derived from the participant's performance rating from the performance management process. This ensures that the LTI grant is based on achievement of goals linked to delivering the business strategy.

Executive Long-Term Incentive Plan (Executive LTI Plan)

A new Executive LTI Plan, incorporating secondary performance measures was introduced in 2015 for Executive Committee members replacing the prior Long-Term Incentive Plan (LTI Plan). Any awards granted under the previous LTI plan will remain subject to the rules of that plan. Key design features are outlined below:

Grant value

Depending on the contribution made towards driving sustainable long-term growth in the business, the individual awards granted may be lower or higher than the target LTI and can range from zero to 150 percent, as outlined in the Articles of Incorporation (Article 29, 10).

Vesting value

The value of the award at vesting will depend firstly on the number of awards that vest subject to the applicable performance conditions, and secondly on the development of the Syngenta share price. The value of the vested award may therefore be higher or lower than the value at grant.

Award types

Participants will receive 50 percent of their incentive in stock options and 50 percent in Performance Stock Units (PSUs).

Granting equal allocations of stock options and PSUs balances the advantages and risks of these instruments. The awards allow participants to benefit from increases in the stock price over time; however, participants are equally exposed to decreases in the stock price.

Syngenta stock options represent the right to purchase Syngenta shares at a fixed strike price for a defined period of time. The exercise price of the stock options is set equal to the closing share price at the grant date. Stock options granted vest after three years and are exercisable for a period of seven years from the vesting date. Syngenta PSUs represent the right to receive Syngenta shares at nil cost at the end of a three-year vesting period. Vesting of stock options and PSUs are subject to both continued employment with Syngenta and the satisfaction of the performance conditions.

Number of Executive LTI awards

The number of awards granted will be calculated with reference to the fair value of each instrument based on the below formula.

$$\text{Number of Executive LTI awards} = \frac{50\% \text{ target amount}}{\text{Option value}} + \frac{50\% \text{ target amount}}{\text{PSU value}}$$

The option value is determined using a commonly accepted stock option pricing method. The PSU value is the closing share price on the grant date.

Performance measures

Stock options

The number of stock options that will vest shall be based on the Company's total shareholder return (TSR) versus a comparator group of 15 other companies over rolling three-year performance periods. Relative TSR has been chosen as the performance measure as it allows for an objective external assessment over a sustained period on a basis that is familiar to shareholders.

The comparator group includes the Company's direct competitors: BASF SE, Bayer AG, The Dow Chemical Co, El du Pont de Nemours & Co and Monsanto Co, and 10 other companies selected from industries and regions where Syngenta competes for capital and talent: Clariant AG, Givaudan SA, Nestle SA, Novartis AG, Roche Holding AG, Akzo Nobel N.V., Danone SA, Koninklijke DSM N.V., SAB Miller Plc and Solvay SA. If any company in the comparator group is deemed by the Compensation Committee to no longer be suitable, for example in the case of delisting, bankruptcy, merger, etc., it will be removed and replaced by a suitable alternative.

At the end of the three-year performance period all of the companies will be ranked from the highest (rank 1) to the lowest (rank 16) TSR. The number of stock options which will vest shall be calculated on a stepped quartile payout scale (four ranked positions per quartile). TSR will be measured in US dollars. The total number of stock options that could vest range from zero to 125 percent of the number granted. Lower quartile performance (ranked positions 13 to 16) will result in zero percent vesting. Upper quartile performance (ranked positions 1 to 4) shall result in 125 percent vesting. The actual value of these stock options will be determined by how far the share price at the end of the performance period has exceeded the exercise price at grant. The Compensation Committee has decided to change the vesting schedule for future plans so that no stock options will vest for below median performance. Above median, stock options will vest on a linear scale from 100 percent vesting at median (Syngenta is ranked 8 out of 16) to 200 percent vesting (Syngenta is ranked 1 out of 16). While this change provides for the same payout probability, it is more aligned with shareholders' interests.

In addition, due to the ChemChina offer to acquire Syngenta described in Item 4, in Item 5 and in Note 30 to the consolidated financial statements in Item 18, the Compensation Committee took the decision to grant 100 percent of the 2016-2018 Executive LTI Plan award in PSUs, i.e. no stock options will be granted in February 2016. The PSUs will continue to be subject to the secondary performance conditions in that 50 percent of the PSUs that will vest shall be based on the Company's total shareholder return versus a comparator group of 15 other companies and the other 50 percent of the PSUs that will vest shall be based on internal performance conditions which support the Company's long-term strategy.

Performance Stock Units (PSUs)

The number of PSUs that will vest shall be based on internal performance measures which support the Company's long-term strategy:

- Agribusiness growth and business quality – these targets are aligned with the Company's objective of increasing its share over time at higher levels of profitability.
- Cash flow return on investment (CFROI) – a focus on cash generation and cash return to shareholders is an integral part of the Company's financial framework. The value of the investments necessary to grow the business is measured through CFROI.
- EBITDA margin percent – reflects the Company's commitment to margin improvement through the Accelerating Operational Leverage (AOL) program.
- Good Growth Plan – reflects the Company's commitment to improving resource efficiency, rejuvenating ecosystems and revitalizing rural communities.

The Compensation Committee believes that these performance measures, in addition to relative TSR, best represent the measures used by shareholders to assess the Company's value. Each of the internal performance measures has a weighting of 25 percent and is tested annually during the performance period. The Plan is structured in a way that the impact of achievement increases in weighting over the three years.

The total number of PSUs that could vest range from zero to 100 percent of the number granted.

Claw back

In the event that the Compensation Committee determines that an Executive Committee member materially breached their duties as a member of the Executive Committee, it reserves the right to claw back a portion or all of the PSUs and non-vested stock options from that Executive Committee member.

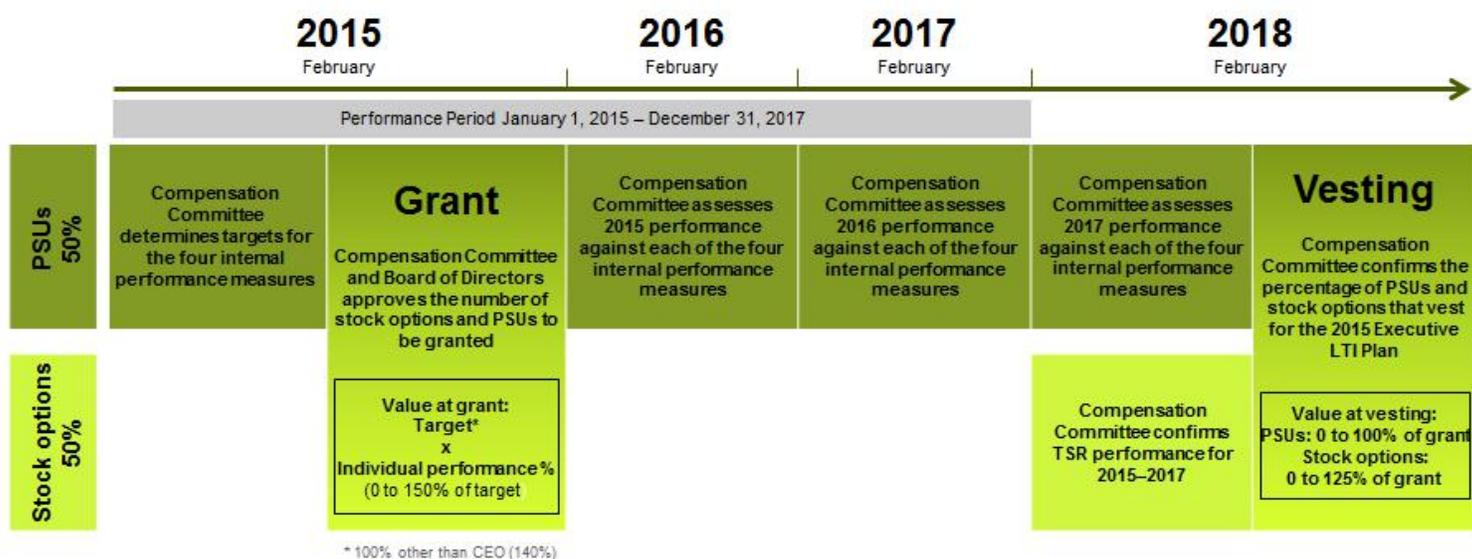
Target setting and disclosure for the PSUs

Each year, the Compensation Committee approves the performance measure targets for a new three-year plan which shall be aligned to both the long-term strategy of the Company and to the operating budget. As the targets are market sensitive the Company will not disclose them in advance but will disclose retrospectively, on an annual basis, the degree to which performance was achieved against the targets. The Compensation Committee believes that the consistent use of performance measures together with the overlapping performance years will enhance the focus on longer-term operating performance.

Leaver rules

Leaver circumstances are governed by the Executive LTI Plan regulations. In the case of retirement, a participant's equity awards will vest with performance measured as per the original schedule. In the event of resignation the equity awards will vest with performance measured as per the original schedule, pro-rated for time served.

The following schedule, using the 2015 Executive LTI Plan as an example, presents the Executive LTI Plan operation:



The Compensation Committee will follow the same process each year for successive plans.

Long-Term Incentive Plan (LTI Plan) for managers below Executive Committee

The LTI Plan continues to operate for employees below the Executive Committee, around 1,000 participants globally.

The LTI Plan operates similarly to the Executive LTI Plan though with the following distinguishing features:

- Participants receive 50 percent of their incentive in the form of stock options and 50 percent in the form of Restricted Stock Units (RSUs).
- Both stock options and RSUs are subject to a three-year vesting period and to continued employment with Syngenta; there are no additional performance measures.

Due to the ChemChina offer to acquire Syngenta described in Item 4, in Item 5 and in Note 30 to the consolidated financial statements in Item 18, the Compensation Committee took the decision to grant 100 percent of the 2016 LTI Plan award in RSUs, i.e. no stock options will be granted in February 2016.

The Executive Committee members participated in this LTI Plan for the grants made in 2014 and prior years.

Employee Share Purchase Plan (ESPP)

The ESPP provides employees with the opportunity to become Syngenta shareholders through the purchase of Syngenta shares at a preferential price.

The Swiss ESPP allows participants to purchase up to CHF 5,000 worth of shares at 50 percent of the share price on the date of purchase. These shares are subject to a blocking period of three years. The regulations of the Swiss ESPP allow all employees in Switzerland to be eligible to participate in the Swiss ESPP. However, from 2015 onwards, members of the Executive Committee were no longer eligible to participate.

Where reasonably possible, similar all-employee share purchase plans are in operation in other countries, taking into account local practices, tax and legal requirements.

Sales Incentive Plans

Sales Incentive Plans are designed for employees whose primary responsibility is revenue generation based on the sale of Syngenta products. They offer these employees the opportunity to be compensated for individual and team success, based on performance achieved against sales targets.

No member of the Executive Committee participates in a Sales Incentive Plan.

Benefits

Benefits consist mainly of retirement, insurance and healthcare plans designed to provide a reasonable level of security for all employees and their dependents in respect of retirement, health, disability and death in service. The level of benefits is subject to country-specific laws, regulations and market practice. Other benefits that may be provided according to local market practice include long-service awards and perquisites. Employees at all levels who are on an international assignment may also receive benefits in line with the Syngenta International Assignment Policy. Executive Committee members participate in the Company's retirement plans in accordance with applicable laws.

Compensation structure

The compensation elements described in the Compensation Report refer primarily to Switzerland and to senior executives. Although many of the elements are operated consistently on a global basis, local market variations apply.

The following charts illustrate the relation between the different compensation elements at target performance with maximum DSP deferral.

Compensation mix at target for the former Chief Executive Officer %



Compensation mix at target for members of the Executive Committee (excluding CEO) %



The charts show that at maximum DSP deferral more than two-thirds of the target compensation is performance-based and therefore at risk. In addition, at target, equity-based compensation is greater than cash compensation. Members of the Executive Committee are therefore highly exposed to share price movements, which reinforces a focus on the long-term success of Syngenta and aligns their interests with those of the Syngenta shareholders.

Compensation of the Board of Directors

The first vote on the compensation of the members of the Board of Directors was held at the 2015 Annual General Meeting. The compensation expected to be paid during the applicable period between the 2015 and 2016 Annual General Meetings (CHF 4,220,192; \$4,262,820 using the currency exchange rate at December 31, 2015) is within the amount approved by the shareholders (CHF 4,500,000; \$4,545,455 using the currency exchange rate at December 31, 2015).

Compensation of the Chairman

The non-executive Chairman of the Board receives a predefined annual fee and no variable compensation. Two-thirds of the annual fee is paid monthly in cash and one-third is paid quarterly in the form of restricted shares, which are blocked from trading for a period of three years. The number of restricted shares paid each quarter is determined by dividing the share portion of the fee by the market price of a Syngenta share at each quarterly grant date.

Compensation of the former CEO

The former CEO was a member of the Board of Directors and a member of the Executive Committee until he left Syngenta effective October 31, 2015. His compensation is disclosed as part of 2015 compensation for members of the Executive Committee.

Compensation of non-executive Directors

Non-executive Directors receive an annual fee. This consists of a basic fee for services to the Board and an additional fee for individual assignments to committees of the Board. No variable compensation is paid to non-executive Directors.

Non-executive Directors have the option to receive part of their annual fee in the form of shares that are either freely tradable or blocked from trading for five years. This option exists in order to reinforce their focus on Syngenta's long-term, sustainable success and align their interests with those of shareholders. Shares are granted once a year with the grant value per share being the market price at the grant date.

Annual fees for non-executive Directors

Function	Annual fee ¹
Base fees:	
Chairman of the Board	1,822,917
Vice-Chairman of the Board	416,667
Member of the Board	223,958
Additional fees ² :	
Head of the Audit Committee	114,583
Member of the Audit Committee	31,250
Member of the Compensation Committee	26,042
Member of the Corporate Responsibility Committee	20,833
Member of the Nomination Committee	20,833
Chairman of the Science and Technology Advisory Board	20,833

1 All fee amounts are reported in US dollars and the fees cover the period from AGM to AGM. Members of the Syngenta Board of Directors receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during 2015. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2015 is 0.96 (2014: 0.91). For further information regarding currency exchange rates, see Note 26 to consolidated financial statements in Item 18.

2 No additional fees are payable to the Chairman and the Vice-Chairman

The Board of Directors, at the recommendation of the Compensation Committee following its annual review, took the decision not to increase the annual fees of the non-executive Directors in 2015.

Compensation of non-executive Directors in 2015

Non-executive Directors	Fee in cash	Fee in unrestricted shares	Fee in restricted shares	Number of unrestricted shares	Number of restricted shares	Total number of shares	Other company costs ¹	Total compensation
Michel Demaré ²	1,213,550	-	610,220	-	1,613	1,613	96,938	1,920,708
Vinita Bali ³	244,792	-	-	-	-	-	13,997	258,789
Stefan Borgas ⁴	127,604	127,930	-	304	-	304	14,608	270,142
Gunnar Brock ⁵	359,375	-	-	-	-	-	76,440	435,815
Eleni Gabre-Madhin ⁶	244,792	-	-	-	-	-	-	244,792
David Lawrence ⁷	138,021	138,030	-	328	-	328	38,599	314,650
Eveline Saupper ⁸	125,000	-	125,405	-	298	298	12,513	262,918
Jacques Vincent ⁹	250,000	-	-	-	-	-	-	250,000
Jürg Witmer ¹⁰	416,667	-	-	-	-	-	21,554	438,221
Total	3,119,801	265,960	735,625	632	1,911	2,543	274,649	4,396,035

1 Company-paid social security

2 Michel Demaré is Chairman of the Board, Chairman of the Chairman's & Governance Committee, the Corporate Responsibility Committee and the Nomination Committee

3 Vinita Bali is a member of the Corporate Responsibility Committee

4 Stefan Borgas is a member of the Audit Committee

5 Gunnar Brock is Chairman of the Audit Committee and member of the Nomination Committee. The fee and social security contributions were paid to a company controlled by Gunnar Brock.

6 Eleni Gabre-Madhin is a member of the Corporate Responsibility Committee

7 David Lawrence is a member of the Audit Committee and Chairman of the Science and Technology Advisory Board

8 Eveline Saupper is a member of the Compensation Committee

9 Jacques Vincent is a member of the Compensation Committee

10 Jürg Witmer is Vice Chairman of the Board, Chairman of the Compensation Committee and member of the Chairman's & Governance Committee and the Nomination Committee

All values are reported in US dollars. Members of the Syngenta Board of Directors receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during 2015. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2015 is 0.96 (2014: 0.91). For further information regarding currency exchange rates, see Note 26 to consolidated financial statements in Item 18.

Compensation of non-executive Directors in 2014

Non-executive Directors	Fee in cash	Fee in unrestricted shares	Fee in restricted shares	Number of unrestricted shares	Number of restricted shares	Total number of shares	Other company costs ¹	Total compensation
Michel Demaré ²	1,280,229	-	643,885	-	1,816	1,816	102,269	2,026,382
Vinita Bali ³	258,242	-	-	-	-	-	14,766	273,008
Stefan Borgas ⁴	269,231	-	-	-	-	-	20,345	289,576
Gunnar Brock ⁵	379,121	-	-	-	-	-	81,663	460,784
Eleni Gabre-Madhin ⁶	258,242	-	-	-	-	-	-	258,242
David Lawrence ⁷	232,967	58,562	-	156	-	156	51,470	342,999
Eveline Saupper ⁸	11,760	-	252,266	-	672	672	11,467	275,493
Jacques Vincent ⁹	263,736	-	-	-	-	-	-	263,736
Jürg Witmer ¹⁰	439,560	-	-	-	-	-	30,115	469,676
Total	3,393,088	58,562	896,151	156	2,488	2,644	312,095	4,659,896

1 Company-paid social security

2 Michel Demaré is Chairman of the Board, Chairman of the Chairman's & Governance Committee, the Corporate Responsibility Committee and the Nomination Committee

3 Vinita Bali is a member of the Corporate Responsibility Committee

4 Stefan Borgas is a member of the Audit Committee

5 Gunnar Brock is Chairman of the Audit Committee and member of the Nomination Committee. The fee and social security contributions were paid to a company controlled by Gunnar Brock.

6 Eleni Gabre-Madhin is a member of the Corporate Responsibility Committee

7 David Lawrence is a member of the Audit Committee and Chairman of the Science and Technology Advisory Board

8 Eveline Saupper is a member of the Compensation Committee

9 Jacques Vincent is a member of the Compensation Committee

10 Jürg Witmer is Vice Chairman of the Board, Chairman of the Compensation Committee and member of the Chairman's & Governance Committee and the Nomination Committee

All values are reported in US dollars. Members of the Syngenta Board of Directors receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during 2014. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2014 is 0.91. For further information regarding currency exchange rates, see Note 26 to consolidated financial statements in Item 18.

Compensation of members of the Executive Committee

The first vote on the compensation of the members of the Executive Committee was held at the 2015 Annual General Meeting. The compensation for the applicable financial year (CHF 27,577,663; \$28,726,733 using the 2015 average currency exchange rate) is within the amount approved by the shareholders (CHF 41,000,000; \$42,708,333 using the 2015 average currency exchange rate).

In 2015, the members of the Executive Committee, including the former CEO, received salaries, incentives and other elements, including benefits in kind, in line with the compensation policy and as detailed in the next following table.

John Ramsay was the only Executive Committee member to receive an increase in base salary in 2015, which occurred when he was appointed interim CEO in November 2015.

In 2015, Michael Mack the former CEO received the highest total compensation; his compensation is reported in the second following table. Michael Mack's pro-rated STI for the performance period to October 31, 2015 was paid wholly in cash. He did not receive any DSP awards nor did he receive any Executive LTI Plan awards for 2015.

Compensation to former members of the Executive Committee

The former CEO was a member of the Board of Directors and a member of the Executive Committee until he left Syngenta effective October 31, 2015. Michael Mack had a contractual notice period of 12 months. He received contractual compensation in the amount of CHF 3,061,078; \$3,123,549 using the payment date currency exchange rate (made up of base salary, target STI and other allowances). Michael Mack did not receive a severance payment.

The link between 2015 performance and pay

Both business and individual performance impact the actual variable compensation paid to all employees including the Executive Committee members.

EPS and CFROI are the two financial performance measures used to determine 70 percent of the STI award for Executive Committee members. Both were below target in 2015, therefore the financial STI payout was also below target.

CFROI, EBITDA margin percent, agribusiness growth and business quality and progress against the Good Growth Plan are used as performance measures for the PSUs within the Executive LTI Plan. In 2015 CFROI was below target but all the other measures achieved above target results. Relative TSR over the three-year vesting period is used as the performance measure for the stock options within the Executive LTI Plan and so results are not yet available. The Executive LTI Plan will not payout until 2018.

In terms of 2015 individual performance, which makes up the remaining 30 percent of the STI award and determines the Executive LTI Plan grant, Executive Committee members' goals were to deliver the Company's corporate goals as well as drive sustainable long-term business growth. Overall, despite an exceptionally challenging industry environment and currency headwinds, there was improved profitability and business quality, operational leverage savings were achieved and the Company was able to demonstrate good progress in its R&D pipeline. Actual STI payouts and the Executive LTI Plan grant varied according to each individual's contribution.

Compensation for members of the Executive Committee

The following two tables show in the column for the year 2014 the number of share awards, stock options and PSUs that were granted on February 24, 2015, for the year 2014 (excluding the shares purchased under the Employee Share Purchase Plan). The numbers of units granted were determined after the preparation of the 2014 report and are disclosed retroactively in this 2015 report. As a consequence, the actual values of the granted share awards, stock options and PSUs differ slightly from the values reported in 2014. This is because the number of share awards, stock options and PSUs at grant is rounded to the next whole numbers of units.

Compensation for members of the Executive Committee (a total of 8 people as of December 31, 2015¹)

Compensation elements	Number of units		Values	
	2015	2014	2015	2014
Fixed compensation in cash			7,311,685	8,383,305
Allowances in cash			382,729	298,500
STI compensation in cash ²			1,520,727	1,694,447
Total compensation in cash			9,215,141	10,376,252
DSP deferred shares ^{3, 4}	*	8,887	2,350,569	3,065,366
DSP matching shares ^{3, 5}	*	8,887	2,350,569	3,065,366
LTI options ^{3, 4, 6}	*	164,778	-	5,397,155
LTI PSUs ⁴	*	16,482	8,171,615	5,398,433
ESPP shares	-	112	-	20,714
Insurance, pension costs			1,845,707	2,135,260
Benefits in kind ⁷			183,888	265,416
Company social security cost			1,420,621	1,241,774
Subtotal compensation			25,538,110	
Contractual compensation ¹			3,188,623	
Total compensation			28,726,733	30,965,736

Notes refer to 2015 unless other years are indicated

* The number of units is not determined at the time of preparing this report, see footnotes 4 and 5

1 Michael Mack, former CEO, left Syngenta effective October 31, 2015. The figures for 2015 include his compensation for the period worked in 2015 except for the "Contractual compensation" figure, which is his contractual compensation for the period to October 31, 2016 that was paid upon his departure in 2015 and includes base salary, target STI and other allowances. No grants were made to him under the DSP or the Executive LTI Plan.

2 Short-term incentive in cash, payable in 2016 for 2015

3 The number of deferred shares, matching shares, options and PSUs for 2014 was determined on February 20, 2015, after the preparation of the 2014 report. The numbers of shares, options and PSUs at grant for 2014 were rounded to the next whole number; consequently the values actually granted differ slightly from the values disclosed in the 2014 report. The difference from what was presented in the Compensation Report 2014 is less than USD 6,771.

4 The figure for 2015 is the value of DSP and LTI awards, the number of which will be determined in 2016 after the preparation of this report, and which will be granted in 2016 for 2015

5 The figure for 2015 is the value of DSP matching shares, the number of which will be determined in 2016 after the preparation of this report, and which will be distributed in 2019

6 The Compensation Committee took the decision to grant 100 percent of the LTI award in PSUs and therefore no options will be granted in February 2016.

7 Value of insurance and tax services, including refund of relevant tax (cash)

All values are reported in US dollars. Members of the Syngenta Executive Committee receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during the year. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2015 is 0.96 (2014: 0.91). For further information regarding currency exchange rates, see Note 26 to consolidated financial statements in Item 18.

Highest compensation for a member of the Executive Committee (Michael Mack, former CEO¹)

Compensation elements	Number of units		Values	
	2015	2014	2015	2014
Compensation elements				
Fixed compensation in cash			1,332,469	1,686,818
Allowances in cash			137,068	142,591
STI compensation in cash ²			845,833	225,758
Total compensation in cash			2,315,370	2,055,167
DSP deferred shares ³	-	2,474	-	903,146
DSP matching shares ³	-	2,474	-	903,146
LTI options ³	-	47,412	-	1,730,799
LTI PSUs	-	4,742	-	1,731,090
ESPP shares	-	14	-	2,589
Insurance, pension costs			399,299	453,788
Benefits in kind ⁴			71,292	83,699
Company social security cost			326,190	324,081
Subtotal compensation			3,112,151	
Contractual compensation ¹			3,188,623	
Total compensation			6,300,774	8,187,505

Notes refer to 2015 unless other years are indicated

- 1 Michael Mack, former CEO, left Syngenta effective October 31, 2015. The figures for 2015 include his compensation for the period worked in 2015 except for the "Contractual compensation" figure, which is his contractual compensation for the period to October 31, 2016 that was paid upon his departure in 2015 and includes base salary, target STI and other allowances. No grants were made to him under the DSP or the Executive LTI Plan.
- 2 Short-term incentive in cash, payable in 2016 for 2015
- 3 The number of deferred shares, matching shares, options and PSUs for 2014 was determined on February 20, 2015, after the preparation of the 2014 report. The numbers of shares, options and PSUs at grant for 2014 were rounded to the next whole number; consequently the values actually granted differ slightly from the values disclosed in the 2014 report. The difference from what was presented in the Compensation Report 2014 is less than USD 625.
- 4 Value of insurance and tax services, including refund of relevant tax (cash)

All values are reported in US dollars. Members of the Syngenta Executive Committee receive their cash compensation in Swiss francs. The US dollar compensation amounts presented have been converted into US dollars using the average currency exchange rate in effect during the year. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2015 is 0.96 (2014: 0.91). For further information regarding currency exchange rates, see Note 26 to consolidated financial statements in Item 18.

Holding of shares by non-executive Directors and members of the Executive Committee

Holding of shares of non-executive Directors* as of December 31, 2015 and 2014

	Number of unrestricted shares		Number of restricted shares		% voting rights	
	2015	2014	2015	2014	2015	2014
Non-executive Directors						
Michel Demaré	1,075	1,075	5,694	4,081	< 0.1%	< 0.1%
Vinita Bali	-	-	-	-	< 0.1%	< 0.1%
Stefan Borgas	826	422	1,546	2,167	< 0.1%	< 0.1%
Gunnar Brock	700	700	-	-	< 0.1%	< 0.1%
Eleni Gabre-Madhin	-	-	-	-	< 0.1%	< 0.1%
David Lawrence	12,966	12,638	-	-	< 0.1%	< 0.1%
Eveline Saupper	650	-	1,602	1,304	< 0.1%	< 0.1%
Jacques Vincent	2,682	3,682	-	-	< 0.1%	< 0.1%
Jürg Witmer	9,000	6,000	-	-	< 0.1%	< 0.1%
Total unrestricted/restricted shares	27,899	24,517	8,842	7,552	< 0.1%	< 0.1%
Total shares	36,741	32,069				

* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

Holding of shares by members of the Executive Committee* as of December 31, 2015

	Vested shares			Unvested shares				Total
	Unrestricted	Restricted	Voting rights	Unconverted DSP share awards	Unvested DSP matching rights	Unvested LTI RSU	Unvested LTI PSU	
Members of the Executive Committee								
Caroline Luscombe	2,065	27	< 0.1%	1,110	1,110	1,381	1,220	6,913
Patricia Malarkey	356	-	< 0.1%	476	476	931	1,370	3,609
Christoph Mäder	12,174	1,211	< 0.1%	-	1,184	1,523	1,260	17,352
Jonathan Parr	1,779	27	< 0.1%	745	745	791	1,694	5,781
Mark Peacock	13	27	< 0.1%	1,612	1,612	1,581	1,524	6,369
Davor Pisk	10,573	859	< 0.1%	1,192	2,024	2,080	1,834	18,562
John Ramsay	7,747	797	< 0.1%	1,064	1,834	1,870	1,637	14,949
Jonathan Seabrook	1,133	27	< 0.1%	1,067	1,067	1,342	1,201	5,837
Total Executive Committee shares	35,840	2,975	< 0.1%	7,266	10,052	11,499	11,740	79,372

Michael Mack, former CEO left Syngenta effective October 31, 2015. Michael Mack owned 69,268 vested shares and 27 restricted shares as at October 31, 2015. He continues to hold 4,742 unvested PSUs which will vest according to the original vesting schedule on a pro-rata basis for time served and subject to performance measures. According to the Executive LTI plan regulations and assuming the performance measures are met, a maximum of 988 PSUs could vest.

* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

Holding of shares by members of the Executive Committee* as of December 31, 2014

	Vested shares			Unvested shares			Total
	Unrestricted	Restricted	Voting rights	Unconverted DSP share awards	Unvested DSP matching rights	Unvested LTI RSU	Vested/unvested
Members of the Executive Committee							
Michael Mack	36,550	8,882	< 0.1%	-	8,842	10,073	64,347
John Atkin	4,136	3,408	< 0.1%	-	3,368	3,829	14,741
Caroline Luscombe	437	40	< 0.1%	853	853	1,866	4,049
Patricia Malarkey	193	0	< 0.1%	62	62	1,103	1,420
Christoph Mäder	8,940	1,734	< 0.1%	-	1,694	2,452	14,820
Mark Peacock	35	40	< 0.1%	2,148	2,148	2,393	6,764
Davor Pisk	8,556	2,876	< 0.1%	-	2,836	3,279	17,547
John Ramsay	2,914	2,658	< 0.1%	-	2,618	2,994	11,184
Jonathan Seabrook	1,084	27	< 0.1%	550	550	1,479	3,690
Total Executive Committee shares	62,845	19,665	< 0.1%	3,613	22,971	29,468	138,562

* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

Holding of stock options by non-executive Directors and members of the Executive Committee

As of December 31, 2015 and December 31, 2014, respectively, no non-executive Directors held any stock options.

Holding of stock options by members of the Executive Committee* as of December 31, 2015

Year of allocation	2015	2014	2013	2012	2011	2010	2009	2008	2007
Underlying equity	Share	Share	Share	Share	Share	Share	Share	Share	Share
Term (years)	10	10	10	10	10	10	10	10	10
Exercise period (years)	7	7	7	7	7	7	7	7	7
Option:share ratio	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Exercise price CHF	332.20	325.90	391.40	300.40	308.71	283.70	233.43	301.50	226.70
Vesting status	unvested			vested					
Options held as of December 31, 2015									
Members of the Executive Committee									
Caroline Luscombe	12,192	6,033	3,639	2,637	-	-	-	-	-
Patricia Malarkey	13,697	5,664	772	782	617	-	-	-	-
Christoph Mäder	12,598	6,234	4,387	5,057	3,518	3,304	-	-	-
Jonathan Parr	16,933	3,352	2,176	2,230	1,668	1,632	1,225	-	-
Mark Peacock	15,240	6,787	4,271	4,418	3,639	-	-	-	-
Davor Pisk	18,333	8,446	6,065	6,525	4,586	-	-	-	-
John Ramsay	16,369	7,541	5,497	6,117	4,491	-	4,506	-	2,453
Jonathan Seabrook	13,458	6,452	1,972	2,287	1,791	-	-	-	-
Totals by grant year	118,820	50,509	28,779	30,053	20,310	4,936	5,731	-	2,453
Total unvested options	198,108								
Total vested options				63,483					
Total options on shares				261,591					

Michael Mack, former CEO left Syngenta effective October 31, 2015. Michael Mack owned 119,251 vested stock options as at October 31, 2015. He continues to hold 47,412 unvested stock options which will vest according to the original vesting schedule on a pro-rata basis for time served and subject to performance measures. According to the Executive LTI plan regulations and assuming the performance measures are met, a maximum of 16,463 stock options could vest.

* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

Holding of stock options by members of the Executive Committee* as of December 31, 2014

Year of allocation	2014	2013	2012	2011	2010	2009	2008	2007	2006
Underlying equity	Share	Share	Share	Share	Share	Share	Share	Share	Share
Term (years)	10	10	10	10	10	10	10	10	10
Exercise period (years)	7	7	7	7	7	7	7	7	7
Option:share ratio	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Exercise price CHF	325.90	391.40	300.40	308.71	283.70	233.43	301.50	226.70	185.00
Vesting status	unvested			vested					
Options held as of December 31, 2014									
Members of the Executive Committee									
Michael Mack	25,135	18,953	20,388	15,207	12,398	16,426	4,669	6,075	-
John Atkin	9,551	7,202	7,748	6,114	-	-	-	-	-
Caroline Luscombe	6,033	3,639	2,637	-	-	-	-	-	-
Patricia Malarkey	5,664	772	782	617	-	-	-	-	-
Christoph Mäder	6,234	4,387	5,057	3,518	3,304	-	-	-	-
Mark Peacock	6,787	4,271	4,418	3,639	-	-	-	-	-
Davor Pisk	8,446	6,065	6,525	4,586	-	-	-	-	-
John Ramsay	7,541	5,497	6,117	4,491	-	4,506	-	2,453	3,059
Jonathan Seabrook	5,530	1,972	2,287	1,791	-	-	-	-	-
Totals by grant year	80,921	52,758	55,959	39,963	15,702	20,932	4,669	8,528	3,059
Total unvested options	189,638								
Total vested options				92,853					
Total options on shares				282,491					

* Including related parties. Related parties are spouses, parents, children living in the same household, legal entities they own or otherwise control, and any legal or natural person that acts as their fiduciary

ITEM 7 — MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS**Major Shareholders**

At January 31, 2016, to Syngenta's knowledge the following shareholder held 3 percent or more of Syngenta's share capital:

Name and location of shareholder, nominee or ADS depository	Notified number of shares	Notified holding in % ¹
BlackRock, Inc., New York	4,728,777	5.08 ²

¹ Notified holding in percent of total share capital at the time of the latest disclosure

² Latest disclosure at April 14, 2014

From January 1, 2013, through January 31, 2016, no significant changes in the percentage ownership by this major shareholder were disclosed to Syngenta, as all 8 reported changes in the holdings of BlackRock, Inc. ranged between 4.97 and 5.15 percent.

In addition, since January 1, 2013:

- The Capital Group Companies, Inc. fell below the reportable 3 percent threshold by notifying a holding of 2.96 percent at January 22, 2016. Previously, this shareholder had reported holdings of 4.98 percent at November 16, 2012.
- The Bank of New York Mellon Corporation ("BNYM") fell below the reportable 3 percent threshold by notifying a holding of 2.90 percent at May 14, 2015. From January 1, 2013, through January 31, 2016, BNYM reported 75 changes in their holdings, all ranging between 4.61 and 2.90 percent. In most of the cases, the disclosures were not delivered for crossing of thresholds, but to reflect the addition or deletion of direct or indirect holders within BNYM.

All disclosures made by Syngenta under the Swiss Stock Exchange Act are available on <https://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html>.

Not included in the above list are nominees that hold shares on behalf of other investors and beneficial owners.

All Syngenta shareholders have the same voting rights.

As of January 31, 2016, Syngenta AG itself held 1,157,146 shares in treasury corresponding to 1.25 percent of the share capital.

As of January 31, 2016, the Company is not aware of any other party which held 3 percent or more of the share capital of Syngenta AG. To its knowledge, the Company is not owned or controlled, directly or indirectly, by any other corporation, by any government or by any other natural or legal person, severally or jointly. Except for the proposal by ChemChina to acquire 100 percent of the ordinary shares of Syngenta AG through a tender offer to shareholders described in Item 4, in Item 5 and in Note 30 to the consolidated financial statements in Item 18, there are no arrangements known to the Company, the operation of which may at a subsequent date result in a change of control of the Company.

As of January 31, 2016, 27,079,560 ADSs of Syngenta AG corresponding to 5.83 percent of the share capital and 5,287,347 ordinary shares of Syngenta AG corresponding to 5.69 percent of the share capital were held by a total of 1,448 registered holders domiciled in the United States.

Related Party Transactions

There were no related party transactions other than those described in Item 4 and in Notes 14 and 24 to the consolidated financial statements in Item 18.

Interests of Experts and Counsel

Not applicable.

ITEM 8 — FINANCIAL INFORMATION

Consolidated Financial Statements and Other Financial Information

Consolidated Financial Statements

See Item 18 “Financial Statements” for Syngenta’s consolidated financial statements.

Legal Proceedings

For information regarding legal proceedings, see Note 25 to consolidated financial statements in Item 18.

Dividends and Dividend Policy

The Board of Directors expects to recommend the distribution of future cash returns to shareholders in respect of each financial year. The actual level of the returns will depend on the financial performance of Syngenta as well as on the need to fund capital expenditures, working capital and other investments.

Future returns are anticipated to be proposed largely in the form of dividends. However, all distributions to shareholders proposed by the Board of Directors require the approval of the shareholders of the Company in a General Meeting of Shareholders. Holders of ADSs and CDIs receive their cash payments in relation to the number of Syngenta shares represented by the ADSs or CDIs. The payments to the holders of ADSs listed on the New York Stock Exchange are distributed through the Bank of New York Mellon, which converts the Swiss franc amount into US dollars for distribution to such holders. The payments to holders of CDIs are distributed through CREST, which converts the Swiss franc amount into British pounds for distribution to such holders.

At the Annual General Meeting of Shareholders on April 28, 2015, it was decided to pay a dividend of CHF 11.00 per share. At the 2016 General Meeting of Shareholders on April 26, 2016, the Board of Directors will propose a dividend payment of CHF 11.00 per share. In addition, if the offer to acquire Syngenta shares through a tender offer described in Note 30 to the consolidated financial statements in Item 18 becomes unconditional, Syngenta will pay a special dividend of CHF 5.00 per share immediately before the first settlement of the offer.

For information on Swiss law requirements regarding dividends, see Item 10 “Additional Information—Dividends”. For information about deduction of withholding taxes, see Item 10 “Additional Information—Taxation—Switzerland”.

Significant Changes

No significant changes have occurred since December 31, 2015 except as disclosed in Item 4 and in Note 30 to the consolidated financial statements in Item 18.

ITEM 9 — THE OFFER AND LISTING**Trading Markets and Price Ranges**

Syngenta's shares are listed in Switzerland on the SIX Swiss Exchange, which is the principal trading market for Syngenta's shares. Syngenta's shares are also listed and traded on the New York Stock Exchange (in the form of ADSs).

The information presented in the tables below represent, for the periods indicated, the reported high and low market prices quoted in their respective currency.

Market Prices on the SIX Swiss Exchange

	Price per share in CHF	
	High	Low
Annual Highs and Lows		
2011	324.30	211.10
2012	380.20	274.80
2013	416.00	335.30
2014	364.40	273.20
2015	435.20	280.00
Quarterly Highs and Lows		
2014		
First Quarter	364.40	302.10
Second Quarter	350.30	323.90
Third Quarter	336.40	302.20
Fourth Quarter	325.80	273.20
2015		
First Quarter	338.60	280.00
Second Quarter	435.20	310.80
Third Quarter	414.90	301.00
Fourth Quarter	396.80	288.50
Monthly Highs and Lows for most recent six months		
2015		
August	414.90	305.30
September	346.00	301.00
October	339.50	288.50
November	391.50	329.50
December	396.80	359.00
2016		
January	389.00	348.10

Market Prices on the New York Stock Exchange

	Price per ADS ¹ in \$	
	High	Low
Annual Highs and Lows		
2011	71.87	49.14
2012	83.19	58.03
2013	87.73	74.41
2014	80.25	58.72
2015	98.15	61.61
Quarterly Highs and Lows		
2014		
First Quarter	80.25	67.25
Second Quarter	79.85	72.36
Third Quarter	75.03	63.25
Fourth Quarter	66.83	58.72
2015		
First Quarter	71.24	62.37
Second Quarter	98.15	66.60
Third Quarter	86.73	61.61
Fourth Quarter	79.99	61.81
Monthly Highs and Lows for most recent six months		
2015		
August	86.73	61.92
September	70.70	61.61
October	69.71	61.81
November	79.53	67.34
December	79.99	72.34
2016		
January	77.61	68.94

1 One ADS represents one-fifth of one common share of the Company.

ITEM 10 — ADDITIONAL INFORMATION

Capital Structure and Shares

Upon the decision of the AGM of April 29, 2014, the nominal share capital of Syngenta is CHF 9,294,564.90, divided into 92,945,649 registered shares with a par value of CHF 0.10 each. All of the Syngenta shares have been issued in registered form and are fully paid-in.

Previously, from April 24, 2012, to April 29, 2014, the share capital of Syngenta was CHF 9,312,614.90, divided into 93,126,149 registered and fully paid-in shares with a par value of CHF 0.10 each.

At December 31, 2015, Syngenta does not have any conditional or authorized capital.

At December 31, 2015, Syngenta held 1,161,397 shares in treasury, corresponding to 1.25 percent of the share capital.

Memorandum and Articles of Incorporation

Set out below is a brief summary of certain provisions of the Articles of Incorporation of Syngenta (herein referred to as Aol) and of the Swiss Code of Obligations (Schweizerisches Obligationenrecht) as it relates to the Syngenta shares. This description does not purport to be complete and is qualified in its entirety by reference to the Swiss Code of Obligations and the Aol of Syngenta. Copies of the Syngenta Aol are available at the offices of Syngenta AG, Schwarzwaldallee 215, 4058 Basel, Switzerland, and can be accessed on the Internet (www.syngenta.com) in the section "About Syngenta/Governance". An English translation of the currently valid Aol as approved by the 2014 Annual General Meeting (AGM) is included as an exhibit to this Annual Report.

Company's objects and purposes

Syngenta AG is registered as a stock corporation in the Commercial Register of the Canton of Basel-City under the registration number CHE-101.160.902. The business purpose of Syngenta is to hold interests in enterprises, particularly in the areas of agribusiness; in special circumstances, Syngenta may also directly operate such businesses. Syngenta may acquire, mortgage, liquidate or sell real estate and intellectual property rights in Switzerland or abroad.

Shareholder Participation and Voting Rights

Each share registered under a shareholder's name in the Swiss share register of Syngenta entitles its holder to participate and vote at a general meeting. One share represents one vote. There are no preferential rights for individual shareholders.

Shares may be voted without any limit in scope if holders expressly declare having acquired these shares in their own name and for their own account. In accordance with article 659a of the Swiss Code of Obligations, the Company cannot exercise the voting rights relating to the shares held in treasury.

On the New York Stock Exchange, the shares are traded in the form of American Depositary Shares (ADSs). ADSs are US securities representing Syngenta shares; five ADSs represent one Syngenta share. The Bank of New York Mellon acts as the Syngenta Depositary for ADSs and administers the ADS program in the US. Syngenta ADS holders are entitled to give written instructions to the Depositary on how to vote on their behalf at a general meeting.

Shareholders may only be represented at a shareholders' meeting by their legal representative, another shareholder with the right to vote, proxies designated in agreements with or regulations relating to nominees or the Independent Proxy. Further regulations relating to powers of attorney and general instructions to the Independent Proxy are defined in article 14 of the Syngenta Articles of Incorporation.

Syngenta has issued special provisions concerning nominee registrations: a nominee holding more than 3 percent of the Company's share capital may be registered as a nominee with voting rights only if the nominee discloses the identity of those ultimate beneficial owners of shares claiming 1 percent or more of the Company's share capital.

Voting instructions to be represented by the Independent Proxy can be submitted in writing by returning a proxy form or also via Internet.

Shareholder ownership

The disclosure of share ownership is regulated in article 120 of the the Swiss Financial Market Infrastructure Act (FMIA), which replaced the previous Federal Act on Stock Exchanges and Securities Trading (SESTA) at January 1, 2016. It stipulates that whosoever, directly, indirectly or acting in concert with third parties acquires or sells for their own account shares or purchase or sale rights relating to securities in a company domiciled in Switzerland whose equity securities are listed in whole or in part in Switzerland and thereby attains, falls below or exceeds the threshold percentages of 3, 5, 10, 15, 20, 25, 33 $\frac{1}{3}$, 50 or 66 $\frac{2}{3}$ of voting rights, whether or not such rights may be exercised, must notify the company and the stock exchanges on which the equity securities in question are listed.

Shareholders' Meetings

Under Swiss law, an AGM must be held within six months after the end of Syngenta's business year. Shareholders' meetings may be convened by the Board or, if necessary, by the statutory auditor. A shareholders' meeting is convened by way of a notice in the Swiss Commercial Gazette at least 20 days prior to such meeting. The notice includes the detailed agenda and clear explanations of all proposals by the Board. Registered shareholders may also be informed by mail or by electronic means.

The Board is further required to convene an extraordinary shareholders' meeting if determined by an ordinary shareholders' meeting, if requested by shareholders holding in the aggregate at least ten percent of the share capital of Syngenta or if requested by the auditor.

One or more shareholders whose combined shareholdings represent an aggregate nominal value of at least CHF 10,000 (i.e. 100,000 shares) may demand that an item be included in the agenda of a general meeting of shareholders. Such a demand must be made in writing at the latest 60 days before the meeting and specify the items and proposals of these shareholders.

The shareholders' meeting passes resolutions and holds elections, if not otherwise required by law or the Company's Articles of Incorporation, with the absolute majority of the votes represented. Under Swiss law and per the Company's Articles of Incorporation, a resolution passed at a shareholders' meeting with a supermajority of 66 $\frac{2}{3}$ percent of the votes represented and the absolute majority of the nominal value of the Syngenta shares represented is required for all resolutions as listed in article 704 of the Swiss Code of Obligations.

Any provision in the Articles of Incorporation for a stricter voting requirement than the voting requirements prescribed by law or the existing Articles of Incorporation must be adopted in accordance with such stricter voting requirements. The Articles of Incorporation of Syngenta do not contain provisions that provide stricter voting requirements for shareholders' meetings than the voting requirements prescribed by law.

According to the Syngenta Articles of Incorporation the following powers shall be vested exclusively in the General Meeting of shareholders:

- to adopt and amend the Articles of Incorporation
- to elect the members of the Board, the Chairman of the Board, the members of the Compensation Committee, the Independent Proxy and the external auditor
- to approve the Management Report and the consolidated financial statements

- to approve the annual financial statements and to decide on the allocation of profits shown on the balance sheet, in particular with regard to dividends
- to discharge the members of the Board and the Executive Committee
- to approve the compensation of the Board and the Executive Committee pursuant to article 29 of the Articles of Incorporation
- to pass resolutions concerning all matters which by law or the Articles of Incorporation are reserved to the authority of the General Meeting of shareholders.

The Board implements voting procedures allowing the will of the majority to be determined unambiguously and as efficiently as possible. The Board also takes appropriate measures to allow the Independent Proxy to carry out his function effectively. Whenever possible, votes and elections shall be held electronically; the results shall be made available as soon as possible, but no later than one week after the shareholders' meeting has been held.

Directors

According to article 24 of the Aol, the Board may pass resolutions with respect to all matters which are not reserved to the authority of the shareholders' meeting by law or by the Aol. The exercise of this power does not require shareholder approval.

The members of the Board are elected by the shareholders at the AGM for a term of one year; re-election is possible. The members of the Board shall automatically retire after the lapse of the 12th year of office or, if earlier, on expiry of the 70th year of age. In each case, retirement becomes effective on the date of the next AGM following such event.

The Chairman of the Board and the members of the Compensation Committee are also elected by the AGM for a one-year term of office; re-election is possible.

In all other respects, the Board constitutes itself. In particular, it elects one Vice-Chairman from among its members, appoints the members of the Board Committees (except for the Compensation Committee) and the respective chairpersons, the CEO, the further members of the Executive Committee and the Head Internal Audit. It also designates the Secretary who need not be a member of the Board. The Company Secretary acts as Secretary to the Board.

The Compensation Committee reviews and recommends to the Board on an annual basis a proposal for approval by the AGM of the total compensation of the Board and the Executive Committee. According to article 17 of Syngenta's Aol, the power to approve the compensation of the Board and the Executive Committee pursuant to article 29 of the Aol is exclusively vested in the AGM.

Swiss law requires Directors and members of senior management to safeguard the interests of the Company and imposes a duty of care and a duty of loyalty on such persons. These duties are generally interpreted to mean that Directors and members of senior management may not participate in decisions that personally affect them. Directors and officers are personally liable to the Company for breach of these duties. According to article 6 of the Regulations governing the Internal Organization of Syngenta, all Directors are obliged to leave the meeting room and abstain from deliberating or deciding on any matter that affects or reasonably might affect the interests of such members or of persons or entities closely related to such member. It is the responsibility of each member to inform the Chairman and the Secretary of the Board in case of a potential conflict of interest. The obligations set forth in this provision also apply to the work carried out in Board Committees.

Syngenta's Aol contain no specific provisions permitting or prohibiting Directors from borrowing from the Company. However, Swiss law provides that a Director, or any other persons associated with a Director, must refund to the Company any payments made to such Director or persons by the Company, other than payments made at arm's length. The United States Sarbanes-Oxley Act, enacted in July 2002, makes it unlawful for the Company directly or indirectly to extend or maintain credit, to arrange for an extension of credit or to renew a credit, in the form of a personal loan, to or for its executive officers or Directors.

Each Director will be required to own shares equivalent to 100 percent of their annual fee. Directors must reach the required threshold by December 31, 2016. Any Director who joined on or after January 1, 2014, will have two years from their date of joining the Board to reach the threshold. The shareholdings will be valued as of December 31 each year.

Pre-Emptive Rights

Under Swiss law, any share issue, whether for cash, non-cash consideration or no consideration, is subject to prior approval at the shareholders' meeting. As a rule, Syngenta shareholders have pre-emptive rights for all new issues of securities. However, these pre-emptive rights may be restricted or excluded by a resolution of a shareholders' meeting on valid grounds. The resolution must be taken by a majority of two-thirds of the votes represented at the meeting and the absolute majority of the par value of the shares represented (unless provided otherwise in the AoI). Valid grounds include, for instance, the acquisition of all or part of the assets and liabilities or the acquisition of the shares of another company as well as the creation of employee participation plans. The shareholders may not be treated unequally in connection with any exclusion of pre-emptive rights. Moreover, it must be in the interest of the Company to exclude such pre-emptive rights in any given case. In the event of a conditional or authorized share capital increase, the shareholders' meeting may delegate the decision as to whether pre-emptive rights should be excluded to the Board provided the fundamental principles upon which the decision has to be made are determined pursuant to the shareholders' meeting.

Duration and Liquidation

The AoI do not limit Syngenta's duration. Syngenta may be dissolved at any time by a shareholders' resolution which must be passed by (1) an absolute majority of the Syngenta shares represented at the meeting in the event Syngenta is dissolved by way of liquidation, and (2) a super-majority of two-thirds of the votes represented and the absolute majority of the nominal value of the Syngenta shares represented at the meeting for other events (for example a merger where Syngenta is not the surviving entity).

Under Swiss law, any surplus arising out of liquidation (after the settlement of all claims of all creditors) is distributed to shareholders in proportion to the paid-up nominal value of Syngenta shares held by them.

Dividends

Swiss law requires that at least five percent of the annual net profits of the Company be retained by the Company as general statutory reserves for so long as these reserves amount to less than twenty percent of the Company's nominal share capital. Under Swiss law, dividends are paid only if approved by the shareholders. In addition, the AoI provide that the allocation of profit shown on the Company's balance sheet is determined by shareholders at the shareholders' meeting. The Board may propose that a dividend be paid, but cannot itself approve the dividend. In practice, the dividend proposal of the Board is usually approved at the AGM. Dividends are usually due and payable shortly after the shareholders' resolution relating to the allocation of profits has been passed. The Company only has one class of shares with a nominal value of CHF 0.10 each. Each such share is entitled to share equally in Syngenta's profits and to receive equal dividends. Holders of CDIs and ADSs will receive dividends in proportion to the number of Syngenta shares represented by the CDIs or ADSs.

Redemption Provision

Swiss law limits the number of shares which the Company may hold or repurchase. The Company and its subsidiaries may repurchase shares only if (i) the Company has sufficient free reserves to pay the purchase price and (ii) the aggregate nominal value of such shares does not exceed ten percent of the nominal share capital of the Company. No dividend is paid on shares held by the Company and its subsidiaries. Furthermore, the Company must create a reserve on its balance sheet in the amount of the purchase price of the acquired shares.

Change of control

According to Swiss law, shareholders may pass a resolution to merge with another corporation at any time. In accordance with Swiss law, article 17 of Syngenta's Aol confers authority upon the shareholders to pass resolutions concerning all matters which by law or the Aol are reserved to the authority of the shareholders at the general meeting. However, article 18 of the Aol requires the approval of at least two-thirds of the votes represented at the general meeting in order for the shareholders to effect the dissolution of the Company without liquidation.

Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who hold more than one-third of the voting rights of a company incorporated in Switzerland of which at least one class of equity securities is listed on the Swiss Exchange must submit a takeover bid to all remaining shareholders. A mandatory takeover bid must be made under certain rules (including rules with respect to price and procedures) as set forth in the Swiss Stock Exchange Act.

Significant Differences

Please see the references to Swiss law throughout this Item 10 "Additional Information", which highlight certain significant differences between Swiss law and United States law.

Material Contracts

The following is a summary of Syngenta's material contracts. Because it is a summary, it may not contain all of the information about such contracts that is important to an investor. The summaries are qualified in their entirety by reference to the contracts, copies of which have been filed with the SEC.

Debt Instruments

Please refer to Notes 16 and 18 to the consolidated financial statements in Item 18 for a description of material contracts pertaining to Syngenta's current financial debt.

The Separation Agreements

At the time of Syngenta's foundation in 2000, the legacy companies Novartis and AstraZeneca, Syngenta and several of their affiliates entered into a series of separation agreements, each of which became effective at the completion of the Transactions, the purpose and effect of which was:

- to achieve the separation of the historic, current and possible future liabilities of Novartis agribusiness and Zeneca agrochemicals business from the historic, current and possible future liabilities of the remaining activities of Novartis and AstraZeneca;
- to properly allocate amongst the parties liabilities that may arise under relevant securities laws as a result of any misstatements or omissions contained in the various annual report documentation to be distributed to AstraZeneca and Novartis shareholders or as a result of the Transactions themselves;
- to provide for the provision of various services between Novartis, AstraZeneca and Syngenta on a transitional, and in certain instances a longer-term, basis; and
- to ensure all affected parties have access to necessary relevant information in the future and that, where relevant, such information is subject to appropriate confidentiality provisions.

Out of the initial agreements, the following material agreements are still currently performed in whole or in part or will continue being performed in the future:

Environmental Matters Agreements

The Environmental Matters Agreements between Novartis and Syngenta and AstraZeneca and Syngenta specify the obligations of each party to indemnify each other in respect of liabilities relating to environmental and health and safety matters (other than product liability claims) against respective group companies and affiliates which arise through the historic, current and future operations of Syngenta. The purpose of the Environmental Matters Agreements is to address, in general terms, the rights and obligations of Novartis, AstraZeneca and Syngenta for environmental claims that have been or will be incurred and to identify special arrangements for environmental matters related to specific affiliates of each party. The parties are not obligated to reimburse each other for amounts which are covered under an insurance policy or otherwise from a third party.

Under the Environmental Matters Agreements, Syngenta and its subsidiaries indemnify AstraZeneca and Novartis for matters arising from Syngenta's sites and agribusinesses, with exceptions for certain sites and circumstances.

AstraZeneca and Novartis are allocated liability and indemnify Syngenta for such matters arising from their respective sites and businesses, including AstraZeneca's businesses (not including AstraZeneca's agrochemical business) and sites and Novartis' businesses (not including the Novartis agribusiness) and sites, with exceptions for certain specific sites and circumstances.

Intellectual Property Agreements

Under the Intellectual Property Agreements, Syngenta acquired title to all relevant intellectual property that is exclusive to or predominantly relates to its business. Syngenta will license or will be granted licenses for relevant intellectual property pertaining to the business of Syngenta that it shares with Novartis or AstraZeneca.

Licenses (other than the license of the Zeneca or Novartis house mark and domain names) are worldwide, exclusive in the field, royalty-free and perpetual. The licenses of the Novartis house mark and domain names are exclusive in the agribusiness field, royalty-free and expired three years after the date of the completion of the Transactions.

Exchange Controls

There are currently no Swiss laws, decrees or regulations restricting the payment of dividends or other payments to holders of Syngenta shares or ADSs who are non-Swiss residents. There are no limitations relating only to non-Swiss persons under Swiss law or the Aol of Syngenta on the right to be a holder of Syngenta shares or ADSs.

Taxation

This taxation summary addresses the material Swiss and United States tax consequences to shareholders in connection with the acquisition and disposition of Syngenta shares or ADSs. This summary does not discuss every aspect of taxation that may be relevant to a particular taxpayer under special circumstances or who is subject to special treatment under applicable law and is not intended to be applicable in all respects to all categories of investors. This summary also assumes that Syngenta's business will be conducted in the manner outlined in this annual report. Changes in Syngenta's organizational structure or the manner in which it conducts its business may invalidate this summary. The laws upon which this summary is based are subject to change, perhaps with retroactive effect. A change to these laws may invalidate the contents of this summary, which will not be updated to reflect changes in laws. Prospective investors should consult their tax advisors regarding the particular personal tax consequences of their acquiring, owning and disposing of shares or ADSs.

Switzerland

The following is a summary of certain material tax considerations relevant to the acquisition and disposition of Syngenta shares (not including the treatment of ADSs) under Swiss tax laws. The following summary does not purport to address all tax consequences of the ownership of Syngenta shares, and does not take into account the specific circumstances of any particular investor. This summary is based on the tax laws of Switzerland as in effect on the date hereof, which are subject to change (or changes in interpretation), possibly with retroactive effect. For purposes of the laws of Switzerland and the United States-Switzerland tax treaty, ADS holders will be treated as holders of the underlying Syngenta shares.

Withholding Tax on Dividends and Similar Distributions

Dividends paid and other cash or in kind taxable distributions made by Syngenta to a holder of Syngenta shares (including dividends on liquidation proceeds and stock dividends) are subject to a Swiss withholding tax at a rate of 35 percent. The withholding tax will be withheld by Syngenta on the gross distributions and will be paid to the Swiss Federal Tax Administration. A reduction of the shares' nominal value by means of a capital reduction does not represent a dividend or similar distribution for purposes of Swiss withholding tax. Furthermore, distributions of dividends to shareholders out of qualifying reserves from capital contributions for Swiss withholding tax purposes are as a matter of principle exempt from Swiss withholding tax (*Kapitaleinlageprinzip*).

Swiss resident recipients. Swiss resident individuals or legal entities are generally entitled to a full refund or tax credit for the 35 percent withholding tax if they are the beneficial owners of such distributions at the time the distribution is due and duly report the receipt thereof in the relevant income tax return. The 35 percent withholding tax on intercompany dividends paid from Syngenta to a Swiss "parent company" may be only reported in case respective requirements are met (instead of the withholding and refund procedure).

Non-resident recipients. The recipient of a taxable distribution from Syngenta who is an individual or a legal entity not resident in Switzerland for tax purposes may be entitled to a partial or even a full refund of the withholding tax if either the country in which such recipient resides for tax purposes has entered into a bilateral treaty for the avoidance of double taxation with Switzerland or the bilateral treaty between Switzerland and the European Community regarding measures equivalent to the parent subsidiary directive is applicable and the further conditions of the respective treaty are met.

Holders of Syngenta shares not resident in Switzerland should be aware that the procedures for claiming treaty benefits (and the time frame required for obtaining a refund) may differ from country to country. Holders of Syngenta shares not resident in Switzerland should consult their own legal, financial or tax advisors regarding the procedures for claiming a refund of the withholding tax.

As of January 1, 2016, Switzerland had entered into bilateral treaties for the avoidance of double taxation with respect to income taxes with the following countries:

Albania	France	Lithuania	Singapore
Algeria	Georgia	Luxembourg	Slovakia
Argentina	Germany	Macedonia	Slovenia
Armenia	Ghana	Malaysia	South Africa
Australia	Greece	Malta	Spain
Austria	Hong Kong	Mexico	Sri Lanka
Azerbaijan	Hungary	Moldova	Sweden
Bangladesh	Iceland	Mongolia	Tadzhikistan
Belarus	India	Montenegro	Taiwan
Belgium	Indonesia	Morocco	Thailand
Bulgaria	Iran	Netherlands	Trinidad and Tobago
Canada	Ireland	New Zealand	Tunisia
Chile	Israel	Norway	Turkey
China	Italy	Pakistan	Turkmenistan
Colombia	Ivory Coast	Peru	Ukraine
Croatia	Jamaica	Philippines	United Arab Emirates
Cyprus	Japan	Poland	United Kingdom
Czech Republic	Kazakhstan	Portugal	United States
Denmark	Kyrgyzstan	Qatar	Uruguay
Ecuador	Kuwait	Romania	Uzbekistan
Egypt	Republic of Korea	Russia	Vietnam
Estonia	Latvia	Serbia	Venezuela
Finland			

Double tax treaties with Liechtenstein and Oman have been concluded; however, these treaties are not yet in force.

By exchange of notes, the 1954 Treaty with the United Kingdom applies to Antigua, Barbados, Belize, British Virgin Islands, Dominica, Gambia, Grenada, Malawi, Montserrat, St. Christopher, Nevis and Anguilla, St. Lucia, St. Vincent and the Grenadines. By exchange of letters, the 1973 Treaty with Denmark applies to the Faroe Islands.

Switzerland has also concluded bilateral treaties which are not aimed primarily at avoiding double taxation but which govern the exchange of tax related information. Such tax information exchange agreements are in force with Guernsey, Isle of Man, Jersey, Andorra, Greenland, San Marino and the Seychelles. Other agreements which are not yet in force have been concluded with Belize, Brazil and Grenada.

Besides these bilateral treaties Switzerland has entered into an agreement with the European Community providing for measures equivalent to those laid down in Council Directive 2003/48/EC on taxation of savings income in the form of interest payments. This agreement contains in its Article 15 provisions on taxation of dividends which apply with respect to European Union member states.

Residents of the United States. A non-resident holder who is a resident of the United States for purposes of the United States-Switzerland tax treaty, the "Treaty", is eligible for a reduced rate of withholding tax on dividends equal to 15 percent of the dividend, provided that such holder (i) qualifies for benefits under the Treaty, (ii) holds, directly and indirectly, less than 10 percent of Syngenta voting stock and (iii) does not conduct business through a permanent establishment or fixed base in Switzerland to which the shares or ADSs are attributable. Such an eligible holder must apply for a refund of the amount of the withholding tax in excess of the 15 percent Treaty rate. The claim for refund must be filed on Swiss Tax Form 82 (82C for corporations; 82I for individuals; 82R for regulated investment companies; 82E for other entities), which may be obtained from any Swiss Consulate General in the United States or from the Federal Tax Administration of Switzerland at the address below, together with an instruction form. The original form and three copies of the form must be duly completed, signed before a notary public of the United States, and sent to the Federal Tax Administration of Switzerland, Eigerstrasse 65, CH-3003 Berne, Switzerland. The form must be accompanied by suitable evidence of deduction of Swiss tax withheld at source, such as certificates of deduction, signed bank vouchers or credit slips. The form should be filed no later than December 31 of the third year following the calendar year in which the dividend became payable.

Income and Profit Tax on Dividends and Similar Distributions

<i>Individuals</i>	An individual who is a Swiss resident for tax purposes, or is a non-Swiss resident holding Syngenta shares as part of a Swiss business operation or Swiss permanent establishment, is required to report the receipt of taxable distributions received on the Syngenta shares in his relevant Swiss tax returns. Furthermore, the Direct Federal Tax on dividends, shares in profits, liquidation proceeds and pecuniary benefits from shares (including bonus shares) is reduced to 60 percent (if shares are held as private assets) or 50 percent (if shares are held as business assets) of regular taxation (<i>Teilbesteuerung</i>), if the investment amounts to at least 10 percent of nominal capital of the participation. All cantons have introduced a similar partial taxation on cantonal and communal level. A reduction of the shares' nominal value by means of a capital reduction or a repayment out of qualifying reserves from capital contributions does not represent a taxable distribution received on the Syngenta shares to be reported in his relevant tax return for Swiss resident individuals for tax purposes holding Syngenta shares as private assets.
<i>Legal entities</i>	Legal entities resident in Switzerland or non-Swiss resident legal entities holding Syngenta shares as part of a Swiss establishment are required to include taxable distributions received on the Syngenta shares in their income subject to Swiss corporate income taxes. Payments received under a share capital reduction of Syngenta also qualify as taxable distributions received on the Syngenta shares, as far as the capital reduction is not considered as a (partial) disinvestment (reduction of the book value) in the statutory annual accounts of the legal entity holding Syngenta shares. A Swiss corporation or co-operative or a non-Swiss corporation or co-operative holding Syngenta shares as part of a Swiss permanent establishment may, under certain circumstances, benefit from a tax reduction with respect to dividends and income on capital repayments (participation relief / <i>Beteiligungszug</i>).
<i>Non-resident recipients</i>	Recipients of dividends and similar distributions on shares who are neither residents of Switzerland for tax purposes nor hold Syngenta shares as part of a Swiss business operation or a Swiss permanent establishment are not subject to Swiss income taxes in respect of such distributions.

Tax Treatment of Capital Gains Realized on Syngenta Shares

<i>Individuals</i>	<p>Swiss resident individuals who hold Syngenta shares as part of their private property generally are exempt from Swiss federal, cantonal and communal taxes with respect to capital gains realized upon the sale or other disposal of Syngenta shares, unless such individuals are qualified as security trading professionals for income tax purposes. Gains realized upon a repurchase of Syngenta shares by Syngenta for the purpose of the capital reduction are recharacterized as taxable distributions. The same is true for gains realized upon a repurchase of Syngenta shares if Syngenta were not to dispose of the repurchased shares within six years after the repurchase. In principle, the taxable income would be the difference between the repurchase price and the nominal value of the shares.</p> <p>Individuals who are Swiss residents for tax purposes and who hold the Syngenta shares as business assets, or are non-Swiss residents holding Syngenta shares as part of a Swiss business operation or Swiss permanent establishment, are required to include capital gains realized upon the disposal of Syngenta shares in their income subject to Swiss income tax. Certain reductions or partial taxations similar to those mentioned above for dividends (<i>Teilbesteuerung</i>) might be available if certain conditions are met (e.g. holding period of at least one year). Whether shareholders are entitled to these reductions needs to be assessed on an individual basis and shareholders should consult their own legal, financial or tax advisor.</p>
<i>Legal entities</i>	Legal entities resident in Switzerland or non-Swiss resident legal entities holding Syngenta shares as part of a Swiss permanent establishment are required to include capital gains realized upon the disposal of Syngenta shares in their income subject to Swiss corporate income tax. Under certain circumstances including either a minimum holding of 10 percent or an entitlement to at least 10 percent of the profits and reserves of the issuer and cumulatively a holding period of at least 1 year of the Syngenta shares, they benefit from relief from taxation with respect to gains realized upon the disposal of shares (qualified participation) (<i>Beteiligungszug</i>).
<i>Non-resident individuals and legal entities</i>	Individuals and legal entities which are not resident in Switzerland for tax purposes and do not hold Syngenta shares as part of a Swiss business operation or a Swiss permanent establishment are not subject to Swiss income taxes on gains realized upon the disposal of the shares.

Net Worth and Capital Taxes

<i>Individuals</i>	Individuals who are Swiss residents for tax purposes, or are non-Swiss residents holding Syngenta shares as part of a Swiss business operation or Swiss permanent establishment are required to include their Syngenta shares in their wealth which is subject to cantonal and communal net worth tax.
<i>Legal entities</i>	Legal entities resident in Switzerland or non-Swiss resident legal entities holding Syngenta shares as part of a Swiss permanent establishment are required to include their Syngenta shares in their assets which are subject to cantonal and communal capital tax.
<i>Non-resident individuals and legal entities</i>	Individuals and legal entities which are not resident in Switzerland for tax purposes and do not hold Syngenta shares as part of a Swiss business operation or a Swiss permanent establishment are not subject to Swiss cantonal and communal net worth and capital taxes.

Gift and Inheritance Tax

Transfers of Syngenta shares may be subject to cantonal and/or communal inheritance or gift taxes if the deceased or the donor or the recipient were resident in a Canton levying such taxes and, in international circumstances where residency requirements are satisfied, if the applicable tax treaty were to allocate the right to tax to Switzerland.

Stamp Tax upon Transfer of Securities (Umsatzabgabe)

The transfer of Syngenta shares, whether by a Swiss resident or non-resident holder, may be subject to a Swiss securities transfer tax in the amount of half of 0.15 percent of the sales proceeds for the seller if the sale occurs through or with a Swiss bank or other professional securities dealer as defined in the Swiss Federal Stamp Tax Act.

United States

The following discussion is a summary of the material United States federal income tax considerations relevant to the ownership by United States Holders described below of Syngenta shares or Syngenta ADSs, but it does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a particular investor's decision to acquire such securities. For purposes of this discussion, "United States Holders" are beneficial owners of Syngenta shares or Syngenta ADSs that, for United States federal income tax purposes are (i) United States citizens or residents, (ii) corporations, or other entities taxable as corporations, created or organized in or under the laws of the United States or any political subdivision thereof, or (iii) estates or trusts the income of which is subject to United States federal income taxation regardless of its source. In general, if you are the beneficial owner of Syngenta ADSs, you will be treated, for United States federal income tax purposes, as the beneficial owner of the Syngenta shares represented by those ADSs. Accordingly, no gain or loss will be recognized if you exchange Syngenta ADSs for the Syngenta shares.

The United States Treasury has expressed concerns that parties to whom American depositary shares are pre-released may be taking actions that are inconsistent with the claiming of foreign tax credits by United States Holders. Such actions would also be inconsistent with the claiming of the reduced rate of tax, described below, applicable to dividends received by certain non-corporate holders. Accordingly, the creditability of Swiss withholding taxes and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below, could be affected by actions taken by parties to whom the ADSs are pre-released.

This summary does not address all of the United States federal income tax considerations that may be relevant to the particular circumstances of a United States Holder of Syngenta shares or Syngenta ADSs, and does not discuss any aspect of state, local or non-United States tax law. Moreover, this summary deals only with United States Holders that will hold Syngenta shares or Syngenta ADSs as capital assets for United States federal tax purposes (generally, property held for investment), and it does not describe all of the US federal income tax considerations that may be relevant to United States Holders that are subject to special tax rules, such as certain financial institutions, insurance companies, dealers and traders in securities and foreign currencies, tax-exempt organizations, investors liable for alternative minimum tax, persons that hold Syngenta shares or Syngenta ADSs as part of a hedge or any similar transaction, partnerships or other entities classified as partnerships for US federal income tax purposes, persons owning, directly, indirectly or constructively, 10 percent or more of the voting stock of Syngenta and persons whose “functional currency” is not the US dollar. This summary is based on the United States Internal Revenue Code of 1986, as amended (the “Code”), Treasury regulations promulgated thereunder, and administrative and judicial interpretations thereof, all as of the date hereof, and all of which are subject to change, possibly with retroactive effect. It is also based in part on representations by the Depositary and assumes that each obligation under the Deposit Agreement and any related agreements will be performed in accordance with their terms. Syngenta believes that it was not a Passive Foreign Investment Company (a “PFIC”) for United States federal income tax purposes for 2015. The following discussion assumes that Syngenta is not, and will not become, a PFIC. However, since PFIC status depends on the composition of a company’s income and assets and the market value of its assets from time to time, there can be no assurance that Syngenta will not be considered a PFIC in any taxable year. Shareholders should consult their own tax advisors as to the tax considerations relevant to the ownership of Syngenta shares or ADSs in light of their particular circumstances, including the effect of any state, local or non-United States laws and including their eligibility for benefits under the Treaty.

Distributions

A distribution received by a United States Holder in respect of Syngenta shares or Syngenta ADSs other than certain pro rata distributions of common shares, generally will be considered a taxable dividend to the extent paid out of Syngenta’s current or accumulated earnings and profits (as determined for United States federal income tax purposes). Because Syngenta does not maintain calculations of its earnings and profits under US federal income tax principles, it is expected that distributions will generally be reported to United States Holders as dividends.

United States Holders must include the gross amount of any taxable dividend (including any amount withheld in respect of Swiss income taxes) in gross income. The dividend will be subject to United States federal income tax as ordinary foreign source dividend income. Subject to certain limitations, and the discussion above regarding concerns expressed by the US Treasury, dividends paid to certain non-corporate United States Holders in taxable years beginning before January 1, 2014 may be taxable at favorable rates, provided that certain holding period and other requirements are met. Effective January 1, 2013, the American Taxpayer Relief Act raises the maximum rate to 20 percent for individuals with incomes over \$400,000. In addition, under the Patient Protection and Affordable Care Act, higher income taxpayers must pay an additional 3.8 percent tax on net investment income to the extent certain threshold amounts of income are exceeded. The holders should consult their own tax advisors regarding the availability of the reduced rate of tax based upon on their particular situation. Dividends will not be eligible for the dividends-received deduction generally available to United States corporations under the Code. Such dividends will constitute foreign source dividend income for foreign tax credit purposes.

Taxable dividends paid in Swiss or other foreign currency will be included in a United States Holder’s gross income in a US dollar amount calculated by reference to the exchange rate in effect on the date the dividend is received by the United States Holder, in the case of Syngenta shares, or by the depositary, in the case of Syngenta ADSs, regardless of whether the payment is in fact converted into US dollars. If the dividend is converted into US dollars on the date of receipt, US holders should not be required to recognize foreign currency gain or loss in respect of the dividend income. United States Holders may have foreign currency gain or loss if any such Swiss or foreign currency is converted into US dollars after the date of receipt. United States Holders should consult their own tax advisors concerning the possibility of foreign currency gain or loss if any such Swiss or other foreign currency is not converted into US dollars on the date of receipt.

Subject to certain conditions and limitations under United States federal income tax law, and subject to the discussion above regarding concerns expressed by the US Treasury, a United States Holder will be eligible to claim a foreign tax credit for Swiss withholding taxes imposed at the rate provided by the Treaty on distributions by Syngenta in respect of its Syngenta shares or Syngenta ADSs. Swiss taxes withheld in excess of a rate provided in the Treaty will not be eligible for credit against a United States Holder's federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. In lieu of claiming a foreign tax credit, a United States Holder may choose to deduct such Swiss withholding taxes in computing its United States federal taxable income (but only if such holder does not elect to claim a foreign tax credit in respect to any foreign income taxes paid or incurred for the taxable year). The United States federal income tax rules relating to foreign tax credits are extremely complex. United States Holders should consult their own tax advisors concerning the availability of foreign tax credits based upon their particular situations.

Dispositions

Upon a sale or other taxable disposition of Syngenta shares or Syngenta ADSs, a United States Holder will generally recognize gain or loss in an amount equal to the difference between the amount realized on the disposition and the United States Holder's tax basis in the Syngenta shares or Syngenta ADSs. Such gain or loss will be capital gain or loss, and will be long-term capital gain or loss if the United States Holder held the Syngenta shares or Syngenta ADSs for more than one year at the time of disposition. A long-term capital gain of a non-corporate US Holder is generally taxed at a rate of 20 percent plus the net investment income rate of 3.8 percent, based on specific income thresholds, for a maximum rate of 23.8 percent. The deduction of capital losses is subject to certain limitations under the Code. Any gain recognized by a United States Holder on a sale or other taxable disposition of Syngenta shares or Syngenta ADSs generally will be treated as derived from United States sources for United States foreign tax credit purposes.

Backup Withholding and Information Reporting

Information reporting requirements may apply to a United States Holder with respect to the interest in specified foreign financial assets with a value above the applicable reporting threshold in addition to distributions by Syngenta, or to the proceeds of a sale or redemption of Syngenta shares or Syngenta ADSs. Backup withholding may apply to these payments if the United States Holder fails to furnish its correct taxpayer identification number and certify that such holder is not subject to backup withholding, or to otherwise comply with the applicable requirements of the backup withholding rules. Any amounts withheld under the backup withholding rules will be allowed as a credit against such holder's United States federal income tax liability, and may entitle the holder to a refund, provided that the required information is furnished to the Internal Revenue Service.

Foreign Account Tax Compliance Act

On March 18, 2010, the United States enacted provisions commonly referred to as the Foreign Account Tax Compliance Act (FATCA), which introduce reporting and withholding requirements for Foreign Financial Institutions (FFIs) with respect to certain accounts and payments effective as from July 1, 2014. On February 14, 2013, Switzerland and the United States signed an Intergovernmental Agreement (IGA) regarding the implementation of FATCA with respect to Swiss Financial Institutions. Syngenta has conducted a FATCA impact analysis and has concluded that Syngenta AG is not a FFI and the Syngenta group affiliates should not be materially impacted by FATCA.

Where You Can Find More Information

Syngenta is subject to the informational reporting requirements of the Securities Exchange Act of 1934, as amended. Accordingly, Syngenta will file reports and other information with the Commission. Such reports and other information may be inspected without charge, and copies thereof may be obtained at prescribed rates from, the public reference room of the Commission's principal office at 100 F Street, N.E., Washington, DC 20549, United States. The public may obtain information on the operation of the Commission's public reference room by calling the Commission in the United States at 1-800-SEC-0330. In addition, this report and other information Syngenta files with the Commission are available on the website maintained by it at <http://www.sec.gov>. Copies of reports and other information concerning Syngenta are also available for inspection at the offices of the New York Stock Exchange, 11 Wall Street, New York, NY 10005, United States.

ITEM 11 — QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**Overview**

The nature of Syngenta's business and its global presence exposes it to market risks, which include potential unfavorable changes in foreign exchange rates, interest rates, commodity prices and other market prices (equities, credit spreads etc.), (ii) counterparty risk and (iii) liquidity and refinancing risk.

A financial risk management framework is in place in the form of a Treasury policy approved by the Board of Directors. This policy provides guidance over all Treasury and finance related matters, is underpinned by delegated authority guidelines and is additionally supported by detailed procedures in place across Syngenta. In accordance with its Treasury policy, Syngenta actively monitors and manages financial risk with the objectives of reducing fluctuations in reported earnings and cash flows from these risks and providing economic protection against cost increases. These objectives are achieved through (a) a monthly assessment of the impact of market risks against defined risk limits (see following section), which take into account the risk appetite of Syngenta and (b) the use of a variety of derivative and non-derivative financial instruments.

Financial instruments available for use to mitigate these risks are selected by Syngenta according to the nature of the underlying risk. These instruments are designed to economically hedge underlying risks arising from operational activities and from funding and investment positions. Syngenta does not enter into any speculative financial transactions.

Assessment of the impact of market risks

The impact of market risks is assessed using a variety of Value-at-Risk (VaR) and Earnings-at-Risk (EaR) methods. These methods are adjusted to reflect the nature of the exposures and the impact of the exposures on profit or loss of the financial year. The specific methods used to assess the impact of financial risks are described below:

Risk	Method	Exposure (financial statement item)	Time horizon (months)
Foreign exchange risk			
Trading transaction – committed	VaR	Monetary asset and liability carrying amounts	1
Trading transaction – uncommitted	EaR	Operating income	12
Issued financial debt and interest	VaR	Monetary liability carrying amounts	1
Translation	VaR	Cumulative translation adjustment in OCI	1
Interest rate risk	EaR	Interest expense	12
Commodity price risk	EaR	Operating income	12

VaR and EaR calculations are risk management tools designed to statistically estimate with a pre-set probability the maximum amount of potential losses in value (VaR) or earnings (EaR) over a specific (holding) time period given current and forecast positions and possible movements in market prices. The VaR and EaR methods used by Syngenta estimate the gross impact on the consolidated financial statements if the underlying items were not hedged and the net impact of the combined underlying hedged items and the related hedging instruments. VaR and EaR calculations attempt to recognize that holding different assets and liabilities or incurring different future cash flow exposures may reduce portfolio risk through diversification. Such diversification effects are captured within the calculations, which aim to present the risk based on Syngenta's currency exposure as a whole, rather than the sum of the exposures to the individual currency pairs within the portfolio of exposures. Using historical data, the VaR and EaR calculations are designed to predict possible changes in the markets in the future at a 99 percent confidence level, with a 1 percent probability that actual results will be worse than calculated. The time horizon used to calculate the VaR figures for each risk is determined by the time period over which management forecasts and monitors changes in the risk and in Syngenta's exposure to it and takes mitigating actions in response to those changes.

The assessment of the impact of market risks is performed monthly and the results are compared against annually defined risk limits. In cases where the net impact is higher than a risk limit, Syngenta enters into derivative financial instrument transactions in order to stay within the risk limits approved in the risk management policy. Breaches of risk limits, should they occur, are immediately reported to senior management.

Syngenta cannot predict future movements in risk variables precisely, therefore calculations of the impact of market risks neither represent actual losses nor consider the effects of potential favorable movements in underlying risk variables. Accordingly, these calculations may only be an indication of future movements to the extent the historic market patterns repeat in the future.

Foreign exchange risk

Operating worldwide exposes Syngenta to foreign exchange transaction and translation risk at both the Group and subsidiary level. Syngenta's policy is to hedge the effect of foreign exchange translation risk on shareholders' equity only in specific circumstances, for example to protect the value of temporary excess foreign currency denominated cash positions.

Foreign exchange transaction risk – committed

Syngenta's individual subsidiaries predominantly transact their operational activities in their respective functional currencies. However, the globally integrated nature of Syngenta's business results in its subsidiaries bearing some amount of transactional balance sheet risk, because some monetary items (including financial liabilities) are denominated in foreign currencies.

Such committed foreign currency exposures are largely generated by the routing of products from Syngenta's central manufacturing sites to its foreign locations. The risk management strategy is to ensure that these committed exposures are fully hedged, unless otherwise approved by Group Treasury, for example where not deemed cost-effective or where there is no forward market for a specific currency.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are foreign exchange forward contracts and cross currency swaps with the same risk (foreign exchange currency index), where the fair value movements of the hedges and the retranslation of the underlying committed exposures are largely offset in profit or loss.

The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the items within the hedged exposure effectively matches the timing of the cash flows of the derivative instrument.

Net committed transactional currency exposures are identified and reported on a monthly basis by business units. The impact of the hedging program can be illustrated in the VaR calculations for committed exposures, which relate to the revaluation of exposures relative to spot rates over a monthly period. The impact of interest differentials and other factors is not included in these calculations.

(\$m, except risk reduction %)	December 31, 2015			December 31, 2014		
	Value-at-Risk			Value-at-Risk		
Underlying currency (1-month holding period)	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Swiss franc	40	20	50%	47	15	69%
Brazilian real	96	–	100%	54	–	100%
British pound sterling	24	8	68%	36	6	84%
Russian ruble	23	–	99%	17	1	95%
Rest of world	83	24	71%	104	26	75%
Total undiversified	266	52	80%	258	48	81%
Diversification	(155)	(32)	79%	(178)	(33)	82%
Net VaR	111	20	82%	80	15	81%

At December 31, 2015, the Value-at-Risk for a one month holding period, after hedges, at a 99 percent confidence level was \$20 million (December 31, 2014: \$15 million).

The largest exposures arise in Swiss franc, Brazilian real, British pound sterling and Russian ruble. Switzerland and Great Britain house large research and manufacturing sites. In recent years, due to the growth of Syngenta sales, exposures in emerging markets (particularly Brazil) have become significant.

The average Value-at-Risk, after hedges, at a 99 percent confidence level, for the year ended December 31, 2015 was \$13 million (December 31, 2014: \$9 million) and, before hedges, was \$111 million (December 31, 2014: \$112 million).

Foreign exchange transaction risk – uncommitted

Uncommitted transactions are expected, highly probable future transactions for which Syngenta does not yet have a contractual right or obligation (mainly sales and costs).

The US dollar represents the biggest single currency for both sales and costs. However, currency mismatches arise from Syngenta having a centralized cost base, denominated mainly in Swiss francs, British pounds and US dollars, against a local selling base, denominated mainly in US dollars, Euros and various other currencies, including those in emerging markets. In addition, due to the seasonality of Syngenta's business, the majority of sales occur during the first half of the year whereas costs tend to occur more linearly throughout the year.

The risk management objective is to minimize the impact of changes in foreign exchange rates on the operating income forecasted to result from these transactions. Syngenta considers hedging this exposure unless it can reliably expect that operating income could, without significant adverse economic impact, be protected by adjusting the pricing of forecast transactions for changes in foreign exchange rates before those transactions occur. Hedging transactions are managed to minimize the potential adverse movement for the entire portfolio of the net transactional flows, rather than on an individual currency basis. Transactions in a specific calendar year are managed cumulatively in separate portfolios.

The cumulative diversified risk of the whole portfolio can be reduced by entering into derivative transactions for a portion or the full amount of the individual transactions so that the remaining risk of the whole portfolio is at acceptable levels within clearly defined risk limits. The risk management objective is applicable for transactions in the following 24 months. Currently transactions for the next 12 month period are being hedged.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are:

- foreign exchange forward contracts and net purchased currency options with the same risk (foreign exchange currency index) which are eliminating or reducing the uncertainty in the cash flows.
- placed mainly with the same or (to a lesser extent) with shorter maturity than the timing of the cash flows being hedged so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

The impact of the hedging program on operating income can be illustrated in the Earnings-at-Risk calculation performed for anticipated net transactional currency flows for the following year taking into account related currency hedges.

(\$m, except risk reduction %)	December 31, 2015			December 31, 2014		
	Earnings-at-Risk			Earnings-at-Risk		
Underlying currency (12-month holding period)	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Swiss franc	199	90	55%	192	110	43%
Argentine peso	500	500	0%	14	14	–
Brazilian real	94	94	0%	79	75	5%
Russian ruble	10	8	20%	52	52	–
Euro	40	39	3%	46	47	(1)%
British pound sterling	40	25	38%	26	14	48%
Rest of world	191	159	17%	179	161	10%
Total undiversified	1,074	915	15%	588	473	20%
Diversification	(498)	(387)	22%	(373)	(315)	16%
Net EaR	576	528	8%	215	158	27%

At December 31, 2015, the total potential adverse movement for 2016 net transactional flows after hedges relative to year-end, at a 99 percent confidence level, was \$528 million (December 31, 2014: \$158 million).

The net resulting Earnings-at-Risk figures at December 31, 2015 increased compared with December 31, 2014 mainly due to the risk arising from the Argentine peso, which increased to \$500 million at December 31, 2015 from \$14 million at December 31, 2014 due to the significant devaluation that occurred in late December 2015 following the election of the new government in Argentina. The risk calculation method used by Syngenta puts more weight on events occurring closer to the date of the risk calculation. In order for the \$500 million net risk relating to the Argentine peso to be realized, the currency would have to appreciate to a rate of 2.6 to the US dollar from the 13.0 rate at December 31, 2015.

For the remaining risk figures excluding the Argentine peso, the risk is similar to 2014 levels with the greatest exposures being the Swiss franc, where Syngenta has a significant cost base in Switzerland with no material offsetting sales, and the Brazilian real, where a significant cost base is only partially offset by sales because sales in Brazil are largely dollarized.

Foreign exchange transaction risk – issued financial debt and interest

Syngenta has a funding strategy which involves securing a diversification of funding sources in different markets and maintaining an optimal currency mix of debt.

This additional foreign currency exposure arises from the debt issuances in Euro and in Swiss franc under the Euro Medium Term Note (EMTN) program. The risk management objective is to minimize the impact of changes in foreign exchange rates on these foreign currency denominated debt interest and principal repayments.

The foreign exchange risk on the foreign currency denominated debt is managed mostly by derivative instruments, and to a lesser extent within a portfolio of other committed transactions, so that no material foreign currency risk remains as a result of the foreign currency denominated debt.

The derivative instruments which Syngenta's risk management policy allows to be used to manage the risk are:

- cross currency swaps designated as hedges of foreign exchange risk of future interest and principal payments on foreign currency financial debt which are eliminating or reducing the uncertainty in the cash flows.
- placed mainly with the same terms as the items being hedged so that the timing of the interest and principal repayments of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

Foreign exchange translation risk

Translation exposure arises from the consolidation of foreign currency denominated financial statements of Syngenta's subsidiaries. This is reported as currency translation effects in OCI.

Translation risk can be significant; however, Syngenta regards its equity base to be of sufficient magnitude generally to absorb the short- to medium-term impact of exchange rate movements.

Syngenta can use both foreign currency denominated debt and net investment hedging to manage this exposure. The latter incorporates specific actions to protect the value of temporary excess foreign currency denominated cash positions. No hedging was undertaken for exposures of this type during the years ended December 31, 2015, or 2014. The exposure is deemed to be mitigated by the large net asset base of Syngenta and consequently no additional management of the exposure was undertaken in 2015 or 2014.

The table below presents the 1-month translation Value-at-Risk:

(\$m)	December 31, 2015 Value-at-Risk	December 31, 2014 Value-at-Risk
Currency of net investment in subsidiary (1-month holding period)	Gross impact	Gross impact
Brazilian real	164	139
Swiss franc	287	102
Euro	56	31
British pound sterling	61	44
Rest of world	128	123
Total undiversified	696	439
Diversification	(277)	(222)
Net VaR	419	217

At December 31, 2015, the Value-at-Risk for a one month holding period at a 99 percent confidence level was \$419 million (December 31, 2014: \$217 million). The Value-at-Risk at December 31, 2015 is higher than as of December 31, 2014 due to overall increase in foreign exchange volatility.

The two largest single currency exposures arise in the Swiss franc and Brazilian real, driven by the large operations and investments in facilities in Switzerland and Brazil.

The average Value-at-Risk, after hedges, at a 99 percent confidence level, for the year ended December 31, 2015 was \$341 million (December 31, 2014: \$285 million).

Interest rate risk

Syngenta is exposed to fluctuations in interest rates on its borrowings (including forecasted borrowings) and excess cash. While the majority of Syngenta's borrowings have fixed interest rates, portions of Syngenta's net borrowings, including its short-term commercial paper program and local borrowings, are subject to changes in short-term interest rates.

Syngenta monitors its interest rate exposures and analyzes the potential impact of interest rate movements on net interest expense. The risk management strategy involves ensuring an efficient fixed/floating mix of total debt within approved interest rate limits.

The derivative instruments allowed to manage the risk are interest rate swaps relating to future interest payments of financial debt liabilities. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2015, the net amount of Earnings-at-Risk on floating rate debt due to potential changes in interest rates (a parallel shift of 100 bps was applied) was \$10 million (2014: \$6 million). The net amount of Earnings-at-Risk on net debt, as defined under "Capital structure" below, due to potential changes in interest rates was immaterial at December 31, 2015 and 2014.

Commodity price risks

Operating in the agribusiness sector, changes in certain commodity prices affect Syngenta's reported operating results and cash flows. On a limited basis, Syngenta enters into derivative transactions to hedge the exposure of its cost base to commodity prices. This activity comprises oil and natural gas hedging in the UK and USA, as well as soft commodity hedging for corn and soybean purchases by the Seeds business in the USA, Canada, Brazil and Argentina, where Syngenta contracts to purchase various seed crops from growers and hedges the cost of the purchases. In barter arrangements where Syngenta sells products in exchange for receiving a certain amount of a commodity crop, Syngenta hedges the value of the crop. At December 31, 2015, there were no open hedging transactions for Brazil and Argentina corn and soybean price risk.

Syngenta has indirect exposure to oil price fluctuations mainly through the impact of oil prices on the cost of both raw materials, especially chemical intermediates in the Crop Protection business, and distribution activities. At December 31, 2015, there was no hedge protection in place for oil for 2016 (December 31, 2014: no hedge protection in place for oil for 2015). As the exposure to oil is indirect, Syngenta does not calculate the Earnings-at-Risk due to potential changes in oil prices.

Natural gas exposure occurs in Syngenta's primary manufacturing sites and Syngenta is managing the exposure by hedging the main risk component, which is the natural gas market price, contractually linked to the NYMEX natural gas benchmark price. The other risk components within the exposure are immaterial.

The main objective of managing commodity price risk is to reduce the impact of commodity price changes on operating income and to provide economic protection against future cost increases. Syngenta uses fixed price contracts and derivatives (both Over-the-Counter (OTC) and exchange traded instruments, including commodity option and futures contracts) to achieve this objective. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2015, the net amount of Earnings-at-Risk due to potential changes in natural gas prices was not material. Earnings-at-Risk due to potential changes in prices of soft commodities, principally corn and soybean, assuming a 12-month holding period are presented below.

(\$m, except risk reduction %)	December 31, 2015 Earnings-at-Risk			December 31, 2014 Earnings-at-Risk		
	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Soft commodities						
Total undiversified ¹	40	16	60%	30	27	12%

¹ As the main soft commodities are largely correlated to each other, the impact of diversification is immaterial

The Earnings-at-Risk of soft commodities is driven by their high price volatility compared to other asset classes. The hedging program reduces overall 12-month Earnings-at-Risk at December 31, 2015 to \$16 million (December 31, 2014: \$27 million). The decrease in net risk in 2015 is mainly due to higher hedge ratios.

ITEM 12 — DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Fees and Charges for Holders of American Depositary Receipts

The Bank of New York Mellon, as depository for the ADSs (the depository) collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depository collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depository may collect its annual fee for depository services by deductions from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them.

Persons depositing or withdrawing shares must pay:	For:
\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	<ul style="list-style-type: none"> • Issuance of ADSs, including issuances resulting from a distribution, sale or exercise of shares or rights or other property • Cancellation of ADSs for the purpose of withdrawal including if the deposit agreement terminates
\$0.02 (or less) per ADS	<ul style="list-style-type: none"> • Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed had been shares and the shares had been deposited for issuance of ADSs	<ul style="list-style-type: none"> • Distribution of securities distributed to holders of deposited securities which are distributed by the depository to ADS holders
\$0.02 (or less) per ADS per calendar year	<ul style="list-style-type: none"> • Depository services
Registration or transfer fees	<ul style="list-style-type: none"> • Transfer and registration of shares on the Company's share register to or from the name of the depository or its agent when shares are deposited or withdrawn
Expenses of the depository	<ul style="list-style-type: none"> • Cable, telex and facsimile transmissions, etc. (when expressly provided in the deposit agreement) • Converting foreign currency to US dollars
Taxes and other governmental charges the depository or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes	<ul style="list-style-type: none"> • As necessary
Any charges incurred by the depository or its agents for servicing the deposited securities	<ul style="list-style-type: none"> • As necessary

Fees Paid by Depositary to the Company

The Bank of New York Mellon, as depositary, has agreed to reimburse Syngenta for certain expenses it incurs that are related to the administration and maintenance expenses of the ADS program. The depositary has also agreed to pay the standard out-of-pocket maintenance costs for the ADSs, which consist of the expenses of postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend checks, electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimile, and telephone calls. It has also agreed to reimburse the Company annually for certain investor relationship programs or special investor relations promotional activities. In certain instances, the depositary has agreed to provide additional payments to Syngenta based on any applicable performance indicators relating to the ADS facility. There are limits on the amount of expenses for which the depositary will reimburse Syngenta, but the amount of reimbursement available to Syngenta is not necessarily tied to the amount of fees the depositary collects from investors.

From January 1, 2015, to December 31, 2015, Syngenta received from the depositary \$617,660 as payment for the above-mentioned fees, costs and expenses.

PART II

ITEM 13 — DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14 — MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

ITEM 15 — CONTROLS AND PROCEDURES

- a. Syngenta's Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as at December 31, 2015, has concluded that the Company's disclosure controls and procedures (i) were effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and (ii) ensured that information required to be disclosed in the reports that the Company files or submits under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.
- b. Syngenta's Board of Directors and management are responsible for establishing and maintaining adequate internal control over financial reporting. Syngenta's internal control system was designed to provide reasonable assurance to Syngenta's management and Board of Directors regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Syngenta's management assessed the effectiveness of Syngenta's internal control over financial reporting as of December 31, 2015. In making this assessment, it used the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has concluded that, as of December 31, 2015, Syngenta's internal control over financial reporting was effective based on those criteria.

KPMG AG, Switzerland, an independent registered public accounting firm, has issued an opinion on the effectiveness of Syngenta's internal control over financial reporting which is included in this annual report.

- c. See the audit report of KPMG AG, an independent registered public accounting firm, included under Item 18 on page F-1.
- d. There have been no changes in Syngenta's internal controls over financial reporting that occurred during the period covered by this Form 20-F that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 16 — [RESERVED]**ITEM 16A — AUDIT COMMITTEE FINANCIAL EXPERT**

Syngenta's Audit Committee consists of at least three independent non-executive members of the Board; the Chairman of the Board is not eligible as a member of the Audit Committee. Currently, the Committee is composed of Gunnar Brock (Chairman), Stefan Borgas and David Lawrence. Syngenta's Board of Directors has carefully considered the definition of "audit committee financial expert" adopted by the United States Securities and Exchange Commission and has determined that, while each of the directors on the Audit Committee satisfies certain aspects of that definition, none of such directors, individually, qualifies as an audit committee financial expert. Syngenta's Board believes that the collective experience of such members enables them, as a group, to act as an effective Audit Committee and that the Audit Committee has functioned, and can continue to function, effectively without appointing an additional member who would qualify as an audit committee financial expert.

ITEM 16B — CODE OF ETHICS

Syngenta has adopted a Code of Ethics applicable to its Chairman, Chief Executive Officer, Chief Financial Officer, Group Financial Controller, Head of Group Financial Reporting & SOX Compliance, Head of Internal Audit, Head of Group Treasury and all members of the Syngenta Executive Committee. A copy of Syngenta's Code of Ethics has been filed with the Securities and Exchange Commission and is included as Exhibit 11.1 to this annual report. During 2015, no amendments were made to a provision of the Code of Ethics that applies to any of the above-mentioned officers and / or members of the Syngenta Executive Committee and no waivers were explicitly or implicitly granted to any of them, in each case that would be required to be disclosed herein.

ITEM 16C — PRINCIPAL ACCOUNTANT FEES AND SERVICES**Fees Paid to the Independent Registered Public Accounting Firm**

The Annual General Meeting engaged KPMG AG ("KPMG") to perform an annual audit of the Company's financial statements in 2015 and 2014. The following table presents information concerning fees paid to KPMG in each of those years.

(\$m)	2015	2014
Audit fees ¹	9.1	8.3
Audit-related fees ²	0.1	0.3
Tax fees ³	1.2	1.8
All other fees ⁴	0.3	0.6
Total	10.7	11.0

1 Audit services are defined as the audit work required to allow the external auditor to issue an opinion on the statutory and regulatory filings of the Group and its subsidiaries. This category therefore includes services such as statutory and other legally required audits, attest services, comfort letters, consents and assistance with and review of documents filed with the US Securities and Exchange Commission.

2 Audit-related services include audits of pension funds and employee benefit plans, due diligence and related audits, internal control reviews and consultation concerning financial accounting and reporting standards.

3 Tax services include all services performed by the external auditor's tax department except those services related to the audit. It includes tax compliance, tax planning, and tax advice.

4 Other services/additional fees include advice relating to process improvements, training and subscription fees for accounting, and reporting updates.

Pre-Approval of Services Provided by KPMG AG

The Audit Committee has adopted policies and procedures for pre-approving all audit and non-audit work performed by KPMG in 2015 and 2014. Specifically, the policies and procedures prohibit KPMG from performing any services for the Company or its subsidiaries during the years when they are Syngenta's auditor without the prior approval of the Audit Committee.

All of the services provided by KPMG in 2015 and 2014 were approved by the Audit Committee pursuant to the approval policies described above, and none of such services were approved pursuant to the procedures described in Rule 2-01(c)(7)(i)(C) of Regulation S-X, which waives the general requirement for pre-approval in certain circumstances.

ITEM 16D — EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E — PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Month in the year ended December 31, 2015	Total number of shares purchased ¹	Average price paid per share (\$) ²	Total number of shares purchased as part of publicly announced plans or programs ³	Maximum number of shares that may yet be purchased under the plans or programs ³
January				9,009,614
February	18,000	353.11		9,009,614
March	14,000	350.49		9,009,614
April				9,009,614
May				9,009,614
June				9,009,614
July				9,009,614
August	18,000	337.09		9,009,614
September	108,000	348.04		9,009,614
October	135,500	334.11	135,500	8,874,114
November	96,000	346.37	96,000	8,778,114
December				8,778,114
Total	389,500	342.80⁴	231,500	8,778,114

1 158,000 shares were purchased in 2015 on the open market to meet the future requirements of share-based payment plans.

2 Amounts shown reflect the conversion of the applicable CHF amounts into \$ based on month-end CHF/\$ exchange rates.

3 On April 24, 2012, the Annual General Meeting of Syngenta AG authorized the Syngenta Board of Directors to repurchase registered shares under a share repurchase program up to a maximum value of 10 percent of the company's share capital, for the purpose of capital reduction.

On the basis of this authorization, Syngenta established in 2013 a second trading line on the SIX Swiss Exchange with the ticker name SYNNE, which was closed on October 15, 2015. At that date 303,000 shares, out of a maximum of 9,312,614 registered shares, had been repurchased.

On September 3, 2015, Syngenta announced its intention to return capital to shareholders through a new share repurchase program of more than \$2 billion. UBS AG has been mandated to carry out share repurchases on behalf of Syngenta under the terms of article 55c para 2 lit. a of the Swiss Stock Exchange Ordinance (SESTO). The buy-backs will take place under Valor 29.929.808, ISIN CH0299298080.

Consequently, Syngenta announced on October 16, 2015, the opening of a new second trading line on the SIX Swiss Exchange with the ticker name SYNNEE. The maximum amount of daily share purchases is 97,335 shares, according to "Art. 55 b para 1 lit. c SESTO"

Following the decision not to pursue the divestments of the Vegetables and Flowers businesses described in Note 30 to the consolidated financial statements in Item 18, Syngenta discontinued the \$2 billion share repurchase program and closed the mandate with UBS AG. The second trading line at the SIX Swiss Exchange will be closed.

4 Purchase price reflects the weighted-average price paid per share (\$) during 2015.

ITEM 16F — CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G — CORPORATE GOVERNANCE

As permitted by section 303A of the New York Stock Exchange (NYSE) Listed Company Manual, Syngenta's corporate governance practices differ from those of domestic companies in the following ways:

NYSE Corporate Governance Standards (Rules)	Practice at Syngenta
According to paragraph 8 of section 303A (Corporate Governance Standards) of the NYSE Listed Company Manual, shareholders must be given the opportunity to vote on all equity-based compensation plans and material revisions thereto (with limited exemptions).	<p>Syngenta's Articles of Incorporation specify the basic principles relating to performance-based compensation and the award or allocation of equity securities to members of the Board of Directors and the Executive Committee. Details of the compensation plans are disclosed in the annual Compensation Report.</p> <p>The maximum total compensation for members of the Board of Directors and the Executive Committee is submitted for approval to the General Meeting of shareholders every year. However, the decisions on the elements and the structure of the performance-based compensation plans and any revisions thereto are made by Syngenta's Compensation Committee.</p>

ITEM 16H — MINE SAFETY DISCLOSURE

Not applicable.

PART III

ITEM 17 — FINANCIAL STATEMENTS

Syngenta has responded to Item 18 in lieu of responding to this item.

ITEM 18 — FINANCIAL STATEMENTS

The following financial statements, together with the Reports of Independent Registered Public Accounting Firm thereon of February 2, 2016 and February 4, 2014, are filed as part of this annual report:

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ITEM 19 — EXHIBITS

The following documents are exhibits to this annual report:

Exhibit Number	Description of Document
1.1	English Translation of the Articles of Incorporation of Syngenta AG, as amended April 29, 2014*
1.2	English Translation of the Regulations Governing the Internal Organization of Syngenta AG, as amended July 22, 2014*
2.1	Deposit Agreement between The Bank of New York Mellon and Syngenta AG**
2.2	Amended and Restated Trust Deed dated September 30, 2008 among Syngenta Finance N.V., Syngenta Finance AG, Syngenta AG and BNY Corporate Trustee Services Limited, as Trustee***
2.3	Indenture dated as of March 28, 2012 among Syngenta N.V., Syngenta AG and The Bank of New York Mellon****
4.3	Environmental Matters Agreement dated September 12, 2000 between Syngenta AG and AstraZeneca PLC*****
4.4	Environmental Matters Agreement dated September 12, 2000 between Syngenta AG and Novartis AG*****
4.5	Environmental Matters Agreement dated September 12, 2000 among Zeneca AG Products Holdings Inc. and Zeneca Holdings Inc. and Stauffer Management Company*****
4.6	Environmental Matters Agreement dated September 12, 2000 among Syngenta Crop Protection Inc., Novartis Corporation and Novartis Agribusiness Holding, Inc.*****
4.11	License of Intellectual Property Rights Excluding Rights in Trade Marks and Software dated January 4, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.12	License of Intellectual Property Rights Excluding Rights in Trade Marks and Software dated January 4, 2000 between Zeneca Limited and AstraZeneca UK Limited*****
4.13	Trade Mark License dated January 4, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.14	Software License dated January 4, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.15	General Principles for the Separation of Intellectual Property between Novartis and Novartis Agribusiness (Syngenta)*****
4.19	Master Sharing Agreement dated September 12, 2000 between AstraZeneca UK Limited and Zeneca Limited*****
4.20	Multicurrency Revolving Facilities Agreement dated November 2, 2012 for Syngenta AG and the companies named therein as Borrowers, arranged by Banc of America Securities Limited, Banco Santander, S.A., Citigroup Global Markets Limited, Credit Suisse AG, Deutsche Bank AG, HSBC Bank PLC, UBS AG and Unicredit Bank AG, with Banc of America Securities Limited acting as agent and the financial institutions set forth in Schedule I thereto (“the Multicurrency Revolving Facilities Agreement”) ‡
4.21	First Extension Request dated September 16, 2013 and Lenders Consent dated October 18, 2013 under the Multicurrency Revolving Facilities Agreement‡‡
4.22	Second Extension Request dated September, 2014 and Lenders Consent dated October 20, 2014 under the Multicurrency Revolving Facilities Agreement*
4.23	Syngenta Long-Term Incentive Plan - USA (Stock Options and Restricted Stock Units)‡
4.24	Syngenta Deferred Share Plan (Share Awards)‡
4.25	Syngenta Corporation Employee Stock Purchase Plan‡
4.26	Syngenta Share Plan for Non-Executive Directors‡‡‡
4.27	Syngenta 2015 Executive Long-Term Incentive Plan (Stock Options and Performance Stock Units)*
4.28	Notice of Establishment of Uncommitted Revolving Facility Commitments dated January 29, 2016
8.1	Subsidiaries of Syngenta AG§
11.1	Syngenta Code of Ethics for Senior Executive Officers‡‡‡‡
12.1	Certification by CEO and CFO pursuant to Section 302
13.1	Certification by CEO and CFO pursuant to Section 906
15.1	Consent of Independent Registered Public Accounting Firm
15.2	Consent of Independent Registered Public Accounting Firm

* Exhibits incorporated by reference to Annual Report on Form 20-F filed February 12, 2015 (File No. 001-15152).

** Exhibit incorporated by reference to the Registration Statement on Form F-6 filed November 20, 2008 (File No. 333-155523).

*** Exhibit incorporated by reference to Annual Report on Form 20-F filed February 18, 2009 (File No. 001-15152).

**** Exhibit incorporated by reference to Exhibit 4.1 of Report on Form 6-K filed on March 29, 2012 (File No. 001-15152).

***** Exhibit incorporated by reference to the Registration Statement on Form F-4 filed September 12, 2000 (File No. 333-125222).

‡Exhibits incorporated by reference to Annual Report on Form 20-F filed February 14, 2013 (File No. 001-15152).

‡‡ Exhibits incorporated by reference to Annual Report on Form 20-F filed February 13, 2014 (File No. 001-15152)

‡‡‡ Exhibit incorporated by reference to Annual Report on Form 20-F filed February 16, 2012 (File No. 001-15152).

‡‡‡‡ Exhibit incorporated by reference to Annual Report on Form 20-F filed March 25, 2004 (File No. 001-15152).

§ The subsidiaries of Syngenta are set forth in Item 4 of this annual report.

Syngenta hereby agrees to furnish copies of certain long-term debt instruments to the Securities and Exchange Commission upon request of the Commission; therefore such instruments are not being filed as exhibits to this Form 20-F for the year ended December 31, 2015. The amount of debt authorized under each long-term debt instrument does not exceed 10 percent of Syngenta's total assets.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Syngenta AG

By: /s/ John Ramsay

Name: John Ramsay
Title: Chief Executive Officer and
Chief Financial Officer

Dated: February 11, 2016

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
Syngenta AG, Basel

We have audited Syngenta AG's internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Syngenta AG's Board of Directors and management are responsible for maintaining effective internal control over financial reporting and management is responsible for its assessment of the effectiveness of internal control over financial reporting, included in Item 15 (b) of Syngenta AG's Annual Report on Form 20-F for the year ended December 31, 2015. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Syngenta AG maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Syngenta AG and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, cash flows, and changes in equity for each of the years in the two-year period ended December 31, 2015, in the two report dated February 2, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG AG

Basel, Switzerland
February 2, 2016

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
Syngenta AG, Basel

We have audited the accompanying consolidated balance sheets of Syngenta AG and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, cash flows, and changes in equity for each of the years in the two-year period ended December 31, 2015. These consolidated financial statements are the responsibility of Syngenta AG's Board of Directors and management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Syngenta AG and subsidiaries as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the years in the two-year period ended December 31, 2015, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Syngenta AG's internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 2, 2016 expressed an unqualified opinion on the effectiveness of Syngenta AG's internal control over financial reporting.

/s/ KPMG AG

Basel, Switzerland
February 2, 2016

To the Board of Directors and Shareholders of
Syngenta AG, Basel

Report of Independent Registered Public Accounting Firm

We have audited the accompanying consolidated statements of income, comprehensive income, changes in equity and cash flows of Syngenta AG for the year ended December 31, 2013. These financial statements are the responsibility of Syngenta AG's Board of Directors and management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated results of operations and cash flows of Syngenta AG for the year ended December 31, 2013, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

/s/ Ernst & Young AG

Basel, Switzerland
February 4, 2014

Syngenta Group Consolidated Financial Statements

Consolidated Income Statement

(for the years ended December 31 2015, 2014 and 2013)

(\$m, except share and per share amounts)	Notes	2015	2014	2013
Sales	4, 5	13,411	15,134	14,688
Cost of goods sold		(7,042)	(8,192)	(7,986)
Gross profit		6,369	6,942	6,702
Marketing and distribution		(2,210)	(2,497)	(2,394)
Research and development		(1,362)	(1,430)	(1,376)
General and administrative:				
Restructuring	6	(388)	(193)	(179)
Other general and administrative		(568)	(717)	(667)
Operating income		1,841	2,105	2,086
Income from associates and joint ventures		7	7	48
Interest income	28	150	152	120
Interest expense	28	(169)	(195)	(164)
Other financial expense		(22)	(35)	(22)
Currency gains/(losses), net	28	(215)	(139)	(134)
Financial expense, net		(256)	(217)	(200)
Income before taxes		1,592	1,895	1,934
Income tax expense	7	(248)	(273)	(285)
Net income		1,344	1,622	1,649
Attributable to:				
Syngenta AG shareholders	8	1,339	1,619	1,644
Non-controlling interests		5	3	5
Net income		1,344	1,622	1,649
Earnings per share (\$):				
Basic earnings per share	8	14.57	17.66	17.88
Diluted earnings per share	8	14.52	17.60	17.78
Weighted average number of shares:				
Basic		91,908,128	91,674,127	91,952,222
Diluted		92,206,535	92,007,089	92,459,306

The accompanying notes form an integral part of the consolidated financial statements.

All activities were in respect of continuing operations.

Syngenta Group Consolidated Financial Statements

Consolidated Statement of Comprehensive Income

(for the years ended December 31, 2015, 2014 and 2013)

(\$m)	Notes	2015	2014	2013
Net income		1,344	1,622	1,649
Components of other comprehensive income (OCI)				
Items that will not be reclassified to profit or loss:				
(Losses)/gains on equity investments at fair value through OCI	28	(3)	(33)	17
Actuarial (losses)/gains of defined benefit post-employment plans	14, 22	(61)	(511)	146
Income tax relating to items that will not be reclassified to profit or loss	7	10	127	(58)
		(54)	(417)	105
Items that may be reclassified subsequently to profit or loss:				
Unrealized gains/(losses) on derivatives designated as cash flow and net investment hedges and related hedging costs	27	38	(37)	14
Currency translation effects		(698)	(625)	(39)
Income tax relating to items that may be reclassified subsequently to profit or loss	7	(74)	(65)	(59)
		(734)	(727)	(84)
Total OCI		(788)	(1,144)	21
Total comprehensive income		556	478	1,670
Attributable to:				
Syngenta AG shareholders		553	475	1,666
Non-controlling interests		3	3	4
Total comprehensive income		556	478	1,670

The accompanying notes form an integral part of the consolidated financial statements.

All activities were in respect of continuing operations.

Syngenta Group Consolidated Financial Statements

Consolidated Balance Sheet

(at December 31, 2015 and 2014)

(\$m, except share amounts)	Notes	2015	2014
Assets			
Current assets:			
Cash and cash equivalents	28	1,141	1,638
Trade receivables	9, 28	4,128	3,698
Other accounts receivable	9, 28	845	747
Inventories	11	4,345	4,861
Derivative and other financial assets	28	401	377
Other current assets	10	338	244
Total current assets		11,198	11,565
Non-current assets:			
Property, plant and equipment	12	3,383	3,562
Intangible assets	13	3,040	3,186
Deferred tax assets	7	783	1,008
Financial and other non-current assets	14, 28	396	420
Investments in associates and joint ventures	14	177	188
Total non-current assets		7,779	8,364
Total assets		18,977	19,929
Liabilities and equity			
Current liabilities:			
Trade accounts payable	15, 28	(3,311)	(3,472)
Current financial debt and other financial liabilities	16, 28	(730)	(1,329)
Income taxes payable		(444)	(706)
Other current liabilities	17, 28	(983)	(984)
Provisions	19	(193)	(216)
Total current liabilities		(5,661)	(6,707)
Non-current liabilities:			
Financial debt and other non-current liabilities	18, 28	(3,501)	(2,976)
Deferred tax liabilities	7	(668)	(665)
Provisions	19	(727)	(676)
Total non-current liabilities		(4,896)	(4,317)
Total liabilities		(10,557)	(11,024)
Shareholders' equity:			
Issued share capital: 2015: 92,945,649 ordinary shares (2014: 92,945,649)	20	(6)	(6)
Retained earnings		(6,500)	(6,289)
Reserves		(2,316)	(3,052)
Treasury shares: 2015: 1,161,397 ordinary shares (2014: 1,286,312)	20	421	458
Total shareholders' equity		(8,401)	(8,889)
Non-controlling interests		(19)	(16)
Total equity		(8,420)	(8,905)
Total liabilities and equity		(18,977)	(19,929)

The accompanying notes form an integral part of the consolidated financial statements.

Syngenta Group Consolidated Financial Statements

Consolidated Cash Flow Statement

(for the years ended December 31, 2015, 2014 and 2013)

(\$m)	Notes	2015	2014	2013
Income before taxes		1,592	1,895	1,934
Reversal of non-cash items	21	1,203	808	910
Cash (paid)/received in respect of:				
Interest received		138	138	104
Interest paid		(163)	(197)	(187)
Other financial receipts		334	139	112
Other financial payments		(460)	(286)	(247)
Income taxes		(482)	(330)	(292)
Restructuring costs	19	(125)	(26)	(37)
Contributions to pension plans, excluding restructuring costs	19	(156)	(184)	(128)
Other provisions	19	(80)	(70)	(71)
Operating cash flow before change in net working capital		1,801	1,887	2,098
Change in net working capital:				
Change in inventories		32	326	(884)
Change in trade and other working capital assets		(868)	(332)	(365)
Change in trade and other working capital liabilities		225	50	365
Cash flow from operating activities		1,190	1,931	1,214
Additions to property, plant and equipment	12	(453)	(600)	(625)
Proceeds from disposals of property, plant and equipment		74	39	24
Purchases of intangible assets	13	(90)	(82)	(75)
Purchases of investments in associates and other financial assets		(29)	(38)	(27)
Proceeds from disposals of intangible and financial assets		46	39	21
Business acquisitions (net of cash acquired) and business divestments		(10)	(87)	(90)
Cash flow used for investing activities		(462)	(729)	(772)
Increases in third party interest-bearing debt		1,098	2,272	714
Repayments of third party interest-bearing debt		(1,174)	(1,556)	(775)
Sales of treasury shares and options over own shares	23	85	53	83
Acquisitions of non-controlling interests		–	–	(39)
Purchases of treasury shares		(119)	(157)	(176)
Distributions paid to shareholders		(1,078)	(1,032)	(921)
Cash flow used for financing activities		(1,188)	(420)	(1,114)
Net effect of currency translation on cash and cash equivalents		(37)	(46)	(25)
Net change in cash and cash equivalents		(497)	736	(697)
Cash and cash equivalents at the beginning of the year		1,638	902	1,599
Cash and cash equivalents at the end of the year		1,141	1,638	902

Of total cash and cash equivalents of \$1,141 million (2014: \$1,638 million; 2013: \$902 million), \$157 million (2014: \$166 million; 2013: \$153 million) is required to meet insurance solvency requirements of the Group's insurance subsidiaries. These amounts therefore were not readily available for the general purposes of the Group. There are no other significant restrictions on Syngenta's ability to use assets or settle liabilities.

At December 31, 2015, cash equivalents totalled \$839 million (2014: \$1,218 million; 2013: \$518 million) and consisted of bank and money market fund deposits.

The accompanying notes form an integral part of the consolidated financial statements.

Syngenta Group Consolidated Financial Statements

Consolidated Statement of Changes in Equity

(for the years ended December 31, 2015, 2014 and 2013)

(\$m)	Attributable to Syngenta AG shareholders					Retained earnings	Total shareholders' equity	Non-controlling interests	Total equity
	Par value of ordinary shares	Additional paid-in capital	Treasury shares, at cost	Fair value reserves	Cumulative translation adjustment				
January 1, 2013	6	3,437	(411)	(52)	499	5,295	8,774	11	8,785
Net income						1,644	1,644	5	1,649
OCI				17	(86)	91	22	(1)	21
Total comprehensive income	–	–	–	17	(86)	1,735	1,666	4	1,670
Transactions with owners as owners:									
Share based compensation			106			44	150		150
Dividends paid						(921)	(921)		(921)
Share repurchases			(176)				(176)		(176)
Other and income taxes on share based compensation						(2)	(2)	(2)	(4)
December 31, 2013	6	3,437	(481)	(35)	413	6,151	9,491	13	9,504
Net income						1,619	1,619	3	1,622
OCI				(61)	(695)	(388)	(1,144)		(1,144)
Total comprehensive income	–	–	–	(61)	(695)	1,231	475	3	478
Transactions with owners as owners:									
Share based compensation			109			7	116		116
Dividends paid						(1,032)	(1,032)		(1,032)
Share repurchases			(157)				(157)		(157)
Cancellation of treasury shares		(7)	71			(64)	–		–
Other and income taxes on share based compensation						(4)	(4)		(4)
December 31, 2014	6	3,430	(458)	(96)	(282)	6,289	8,889	16	8,905
Net income						1,339	1,339	5	1,344
OCI				24	(760)	(50)	(786)	(2)	(788)
Total comprehensive income	–	–	–	24	(760)	1,289	553	3	556
Transactions with owners as owners:									
Share based compensation			171			(10)	161		161
Dividends paid						(1,078)	(1,078)		(1,078)
Share repurchases			(134)				(134)		(134)
Other and income taxes on share based compensation						10	10		10
December 31, 2015	6	3,430	(421)	(72)	(1,042)	6,500	8,401	19	8,420

The accompanying notes form an integral part of the consolidated financial statements.

The amount available for dividend distribution is based on Syngenta AG's shareholders' equity determined in accordance with the legal provisions of the Swiss Code of Obligations. In 2013, a dividend of CHF 9.50 (\$10.01) per share was paid in respect of 2012. In 2014, a dividend of CHF 10.00 (\$11.25) per share was paid in respect of 2013. In 2015, a dividend of CHF 11.00 (\$11.73) per share was paid in respect of 2014.

The Board of Directors recommends a dividend payment of CHF 11.00 per share (equivalent to \$11.08 per share translated at the December 31, 2015 exchange rate) subject to shareholder approval at the Annual General Meeting (AGM) on April 26, 2016.

Included within the fair value reserves are (i) cash flow hedge reserves, which comprise the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged items that have not yet been recognized in profit or loss, and (ii) fair value reserves, which comprise the cumulative net change in the fair value of investments at fair value through OCI. Movements in the cash flow hedge reserves are shown in Note 27. Movements in the fair value reserves for equity investments are shown in Note 28.

The cumulative translation adjustment comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of long-term monetary items that are part of net investments in foreign subsidiaries.

Syngenta Group Consolidated Financial Statements

1. Basis of preparation of the consolidated financial statements

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS or IFRSs) as issued by the International Accounting Standards Board (IASB). The consolidated financial statements have been prepared on an historical cost basis, except for items that are required by IFRSs to be measured at fair value, principally certain financial instruments and biological assets, which are valued at fair value less costs to sell.

The consolidated financial statements incorporate the financial statements of Syngenta AG, a company domiciled and incorporated in Switzerland, and all of its more than 150 subsidiaries globally (together referred to as “Syngenta”) and Syngenta’s interests in associates and joint ventures. Approximately 40 subsidiaries are considered to be significant legal entities. There are no material non-controlling interests or structured entities. Syngenta’s main research and development facilities are located in Switzerland, UK and USA and its main production sites are in Switzerland, UK, USA, France, China, India and Brazil. Syngenta AG’s principal executive offices are at Schwarzwaldallee 215, 4058 Basel, Switzerland.

The consolidated financial statements are presented in United States dollars (“\$”) as this is the major currency in which revenues are denominated. “\$m” refers to millions of United States dollars. The functional currency of Syngenta AG is the Swiss franc (“CHF”).

Syngenta is a world leading agribusiness operating in the crop protection, seeds and lawn and garden markets. Crop protection chemicals include herbicides, insecticides, fungicides and seed treatments to control weeds, insects and diseases in crops, and are essential inputs enabling growers around the world to improve agricultural productivity and food quality. In Seeds, Syngenta operates in the high value commercial sectors of field crops (including corn, oilseeds, cereals and sugar beet) and vegetables. The Lawn and Garden business provides professional growers and consumers with flowers, turf and landscape, and professional pest management products.

The preparation of financial statements requires management to exercise judgment when applying accounting policies and to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimated. Note 2 below includes further discussion of certain critical accounting estimates.

The consolidated financial statements were approved for issue by the Board of Directors on February 2, 2016 and are subject to approval by the Annual General Meeting on April 26, 2016.

2. Significant accounting policy judgments and estimates

This note describes the impact on Syngenta’s consolidated financial statements of significant accounting judgments made when applying IFRSs and critical assumptions and accounting estimates.

Application of critical accounting policies

Royalty and license income

Individual agreements licensing to third parties the right to use Syngenta technology can and do have unique terms and, consequently, the accounting judgments required to apply IAS 18 “Revenue” to each such agreement can differ significantly.

In 2015, Syngenta entered into license agreements with KWS SAAT SE (“KWS”), Vilmorin & Cie S.A. (“Limagrain”) and their joint ventures AgReliant Genetics LLC, AgReliant Genetics Inc. (collectively “AgReliant”) and Genective S.A. (“Genective”), granting worldwide non-exclusive rights to its corn germplasm and traits portfolio, including in-licensed third party traits. Syngenta received a \$200 million non-refundable license payment in 2015 in accordance with the agreement. Syngenta determined that it has no substantive future performance obligations in respect of this amount and therefore has recognized it in full as revenue in 2015. Further contingent milestone payments may become receivable, and would be recognized at that time as license income, dependent upon future regulatory approvals and agreements. Additional sales-based royalties may also become receivable if sales of licensed products exceed thresholds defined in the agreement, and would be recognized as revenue at the time that the licensees make the related sales.

In 2010, Syngenta entered into a license with Pioneer Hi-Bred International Inc. (“Pioneer”), a subsidiary of E.I. DuPont de Nemours and Co. (“DuPont”) for its corn rootworm trait MIR604 (AGRISURE® RW) for corn seed. Prior to 2013, Syngenta recognized the present value of contractual minimum license income, and a corresponding receivable, upon fulfilment of the relevant milestones. This receivable is payable in instalments with final payments due in 2016. At December 31, 2015, Syngenta reported a \$132 million royalty receivable in other accounts receivable in respect of this non-exclusive global license (2014: \$158 million, of which \$40 million in other current assets and \$118 million in financial and other non-current assets). The remaining minimum license income is due in 2016. Syngenta recognized \$12 million in 2015 (2014: \$14 million; 2013: \$17 million) of imputed interest income on this royalty receivable.

Impairment

For purposes of testing goodwill for impairment, goodwill is allocated to cash generating units (CGUs). Syngenta generally defines each crop protection product active ingredient and each seed crop as a CGU. However, where one active ingredient is sold in mixture with other active ingredients to a significant extent, the active ingredients concerned are grouped together into a single CGU because independent cash inflows only exist at this higher level. Each CGU is generally defined on a global basis, reflecting the international nature of the business, and contains tangible assets such as plant and equipment as well as intangible assets such as product and patent rights.

North America corn and soybean seeds are defined as a single CGU because of common intellectual property and other interdependencies between these two crops, which do not apply to other crops. Goodwill on certain major acquisitions, principally Zeneca agrochemicals business goodwill of \$548 million, was allocated to each Syngenta operating segment in proportion to each such segment’s relative value at the time Syngenta established its current basis of segmentation, and is tested for impairment at those levels by relating the allocated amount for each segment to the total cash flows of the respective segment. The goodwill amounts allocated to segments and significant other CGUs are disclosed in Note 13.

2. Significant accounting policy judgments and estimates continued

For CGUs to which no goodwill is allocated, a reduction in forecast sales within management's five year forecast horizon compared with the previous year's five year forecast cycle, combined with a reduction in latest forecasts of current year sales compared with the current year budget, is generally considered an indicator of market related impairment and results in the performance of detailed impairment tests. Syngenta also performs detailed impairment tests when there are asset specific indicators of impairment such as withdrawal of or restrictions placed upon product registrations, plans to divest products or, for property, plant and equipment, plans to restructure or close a site. Higher discount rates are used to test property, plant and equipment for impairment in the case of restructuring because of the higher risk associated with remaining cash flows when operations are being physically relocated. The value in use calculation takes account of cash flows from the remaining period of operations and includes decommissioning costs. In 2015, in order to enable the business to focus on delivering the AOL restructuring program, Syngenta has continued to use the medium term management forecasts prepared in 2014 for much of its business. For those CGUs, in its 2015 impairment testing Syngenta has relied upon its 2014 recoverable amount estimates, which exceeded the carrying amounts of those CGUs by a substantial margin.

If a CGU becomes impaired, the impairment loss is allocated first to any goodwill in the CGU, and then to reduce the CGU's other assets pro rata.

Classification of assets and liabilities to be divested

On August 18, 2015, Syngenta announced its intention to divest its Flowers seeds business, which is reported as part of its Lawn and Garden operating segment. On September 3, 2015, Syngenta announced actions to accelerate shareholder value creation, including its intention to divest its global Vegetables seeds business, which is reported within the regional operating segments of its integrated Crop Protection and Seeds business, as a means to demonstrate the value of its global seeds portfolio. IFRS 5 requires non-current assets and liabilities that are to be divested to be classified as held for sale in the consolidated balance sheet if they are immediately available for sale in their current condition and the divestment transaction is highly probable and is expected to occur within one year of the balance sheet date. Such classification leads to significant changes in how assets are measured and how assets and liabilities are presented in the consolidated financial statements. At December 31, 2015, Syngenta had initiated an internal review of the proposed divestments to take account of market conditions and the complexity of separating the businesses from Syngenta. In view of this, Syngenta concluded that a sale of these businesses was no longer highly probable and therefore has not classified them as held for sale at December 31, 2015. On February 2, 2016, Syngenta formally decided not to pursue the proposed divestments of Flowers and Vegetables.

Pension asset ceiling

At December 31, 2015, Syngenta has reported other non-current assets of \$21 million (2014: \$8 million) and provisions of \$408 million (2014: \$376 million) as net defined benefit pension assets and liabilities, respectively. IFRSs require Syngenta to estimate the economic benefit it can obtain from the amount by which the fair value of assets held in a defined benefit plan exceeds the defined benefit obligation (DBO) measured in accordance with IAS 19 ("pension surplus"). This applies both when a surplus exists at the reporting date and when a surplus would arise when Syngenta meets an existing minimum funding obligation. Accounting recognition of a surplus in Syngenta's UK defined benefit pension plan is supported by the economic benefit of future contribution savings and, when this benefit is less than the surplus, also by the future refund, net of applicable taxes, which will be unconditionally available to Syngenta when all liabilities have been settled. At December 31, 2015, net defined benefit pension assets have been reduced by \$43 million and net defined benefit pension provisions have been increased by \$9 million, representing the part of the projected UK plan surplus that does not meet the accounting recognition criteria. In 2014, all of the projected UK plan surplus met the accounting recognition criteria. The surplus in Syngenta's US pension plan, which is non-contributory, is supported by the economic benefit of future contribution savings, measured as the excess of future service cost over the present value of required employer contributions for future service ("excess service cost"). At December 31, 2015 and 2014, there is no surplus in Syngenta's Swiss pension plan.

Critical accounting estimates

Foreign currency translation

As Syngenta moves its inventories through a complex international supply chain, they are owned by several group entities over the inventory holding period, which may be up to nine months for crop protection chemicals and longer for certain crop seeds. To determine consolidated cost of goods sold, Syngenta records the historical cost of inventories from the time raw materials are purchased until the finished products reach their final location and condition before sale to third party customers. Inventories in the consolidated balance sheet include all purchase, manufacturing and distribution costs incurred to bring them to their location and condition at the balance sheet date, after eliminating profits and losses arising from intercompany transactions. In 2015, following the removal by the Swiss National Bank of the cap on the Swiss franc value versus the Euro, Syngenta refined the method it uses to measure inventories to refer to the original currencies in which the inventory costs were incurred. Historical cost as expressed in US dollars is measured by translating the costs from those original currencies directly into US dollars using the exchange rates that applied when the costs were incurred. When inventories are sold, consolidated cost of goods sold is determined by translating these currency amounts to US dollars at the average exchange rates of the period in which the sale occurs. Inventories at each period end are measured by translating the costs directly into US dollars at the exchange rates at the balance sheet date. Foreign currency translation gains and losses that result from these translations are recognized in OCI. Prior to 2015, the method used involved indirect translation into US dollars via the currencies of the Syngenta entities which had held the inventories over the period since their initial recognition, which led to product costs varying according to the route they took through Syngenta's supply chain. In the opinion of Syngenta, the refined method it has adopted in 2015 better reflects economic reality when currency exchange rates fluctuate during the inventory holding period, because it ensures that inventories sourced with the same cost profile and which are at the same stage of manufacture are valued consistently regardless of which Syngenta entity purchases and holds them. Syngenta has applied this refined method prospectively as a change in estimate. Had Syngenta applied its current method during 2014 and 2013, 2014 and 2013 net income would have been approximately \$20 million higher and \$19 million lower, respectively, than reported. Had Syngenta continued to apply its previous method, 2015 net income would have been approximately \$73 million lower than reported largely due to the removal of the Swiss franc cap.

2. Significant accounting policy judgments and estimates continued

Syngenta has to make judgments on whether loans between entities within the Syngenta group are likely to be repaid in the foreseeable future in order to allocate foreign currency translation differences on those items to profit or loss if the loan will be repaid or to OCI if the loan is effectively part of the net investment in the borrowing subsidiary. If the functional currency of a subsidiary changes, the capital structure of the subsidiary, including the continuation of loans that are effectively part of the Group's investment in that subsidiary, may require review. In such cases, Syngenta applies any resulting change in the accounting treatment of foreign currency translation gains and losses on the loan from the same date that it applies the functional currency change.

Acquisition accounting

Applying the acquisition method of accounting requires significant management judgment to estimate the fair values and useful lives of the acquired assets, in particular intangible assets such as intellectual property related to currently marketed products and in-process research and development (IPR&D). In 2015, Syngenta recognized new intangible assets of \$25 million (2014: \$64 million) resulting from acquisitions. Fair value measurements are based on the forecast cash flows that Syngenta believes a typical potential buyer would use to value the assets, excluding any synergy benefits considered specific to Syngenta. Key assumptions for technologies under development include:

- the outcomes of research and development activities;
- the probability and likely timing of obtaining regulatory approvals for products based on the technology;
- market size and share;
- sales pricing trends and competitors' reaction;
- cost and efficiency of the production process for the products; and
- the period over which the products are likely to generate economic benefits given the likely impact of patent expirations.

Forecast cash flows for each asset are discounted using a rate developed from the estimated Weighted Average Cost of Capital (WACC) of the acquired company. The specific discount rates are estimated separately for each intangible asset and may vary significantly from one asset to another. Where Syngenta considers the risks applicable to an asset are not fully reflected in the forecast data available, it incorporates a risk premium into the discount rate. If actual cash flows are materially different from those used in calculating fair values, this may lead to changes in amortization expense or asset specific impairment losses in future periods.

Technology based companies acquired by Syngenta may have significant deferred tax assets, related in particular to tax losses carried forward resulting from research and development expenditures. The amount of tax losses available for carry forward upon acquisition is often affected by events that occurred several years before acquisition, which may make estimation difficult. IFRS requires recognition of a deferred tax asset for these losses at the acquisition date to the extent that Syngenta is more likely than not to utilize the losses before they expire through offset against future taxable profits. Management judgment is required about whether possible tax planning strategies are likely to be acceptable to tax authorities in the relevant jurisdictions. If actual taxable profits and outcomes of tax rulings are materially different from the assumptions made at the acquisition date, the income tax expense of future periods could be materially affected.

The acquisition accounting values recognized for intangible assets and deferred tax assets for acquisitions made during the periods presented in these financial statements are given in Note 3 below.

Impairment review

At December 31, 2015, Syngenta has reported intangible assets of \$1,639 million (2014: \$1,660 million) for goodwill and \$1,401 million (2014: \$1,526 million) for intangible assets other than goodwill, as reported in Note 13. The recoverable amount for goodwill has been determined based on value in use of the relevant segment, CGU or group of CGUs to which the goodwill is allocated. The recoverable amounts of all material intangible assets and property, plant and equipment have also been based on their value in use.

The main assumptions used in determining the recoverable amounts for operating segments and other CGUs include market size and Syngenta's market share, future sales prices and volumes, future development expenditures required to maintain products' marketability and registration in the relevant jurisdictions, and products' lives. At operating segment level, the key assumptions related to sales volume and value are expressed separately for each product line, market segment and crop, and assumptions related to expenses are expressed by region. At CGU level, assumptions are expressed by product. The assumptions are reviewed annually as part of management's budgeting and strategic planning cycles. These assumptions can be subject to significant adjustment from such factors as changes in crop growing patterns in major markets (for example, as a result of movements in crop prices), changes in product registration, or pressure from competitor products. Estimated cash flows for operating segments and other CGUs are based on Syngenta management forecasts, cover a five year horizon and include a terminal value which assumes a 2.0 percent long-term growth rate (2014: 2.0 percent), except for one seeds crop CGU facing significant economic challenges where no long term growth has been assumed. Syngenta's forecasts for the North America corn and soybean seed CGU also include the following key assumptions for revenue from seed sales:

- for each of the two crops, market size expressed as acres planted, Syngenta's market share, crop commodity prices, and licensing revenues;
- for new genetic traits, the timing of regulatory approval and marketing launch, and seed pricing compared with existing products.

2. Significant accounting policy judgments and estimates continued

Management believes, based on recent and expected future growth in agricultural markets, that there are long-term prospects for continued growth in Syngenta's business.

The discount rates used to discount the estimated future cash flows included in the value in use calculations are based on a post-tax WACC of 7.1 percent (2014: 6.5 percent). There is considerable debate among financial market participants about what are the most appropriate input values, such as risk-free rate of return, relationship of benchmark industry share prices to the overall equity market (beta) and equity risk premium, to use in a WACC calculation under current market conditions. In 2015, when calculating the discount rate, Syngenta has assumed a 2.9 percent risk free rate equal to market yields on 30-year government bonds (2014: 2.5 percent equal to market yields on 10-year government bonds) at the date of performing the annual impairment test and a 5.0 percent equity risk premium (2014: 5.0 percent). Syngenta now believes that using a 30-year bond yield results in a more appropriate discount rate than a 10-year yield because of current conditions in the government bond market. The results of Syngenta's 2014 impairment testing would not have changed if a 30-year yield had been used at that date. The discount rate determined in this way is considered to include market estimates of industry sector risk premium. Syngenta's CGUs generally reflect the global nature of its Crop Protection and Seeds product sales, and a country risk premium is applied only to those CGUs where the geographical scope of operations and cash flows is limited. The pre-tax discount rates used for all segments, CGUs and groups of CGUs ranged from 8.2 percent to 14.3 percent (2014: 7.4 percent to 16.0 percent).

At December 31, 2015 and 2014, the largest amounts of goodwill were allocated to the Asia Pacific segment (2015: \$338 million; 2014: \$355 million) and the North America corn and soybean CGU (2015 and 2014: \$315 million). The pre-tax discount rate used to test Asia Pacific goodwill for impairment was 8.8 percent (2014: 8.0 percent) and the forecast terminal growth rate was 2.0 percent (2014: 2.0 percent). The pre-tax discount rate used to test the North America corn and soybean CGU for impairment was 8.5 percent (2014: 7.9 percent) and the forecast terminal growth rate was 2.0 percent (2014: 2.0 percent).

In the opinion of Syngenta, the outcomes of the impairment tests are not sensitive to reasonably likely changes in any of the assumptions underlying the cash flow projections used for the impairment tests or in the discount rate in the periods presented for any segment, CGU or group of CGUs for which the carrying amount of goodwill is significant.

For the year ended December 31, 2015, impairment losses for intangible assets were \$22 million (2014: \$nil), relating to a discontinued trademark, a termination of distribution rights and one CGU where expectation of future profitability has reduced. The \$68 million recoverable amount of this CGU at December 31, 2015, which supports the remaining \$17 million carrying amount of non-current assets, is its value in use and was measured using a 8.2 percent pre-tax discount rate. Impairments of property, plant and equipment were \$43 million (2014: \$21 million) as a result of business development and restructuring proposals that do not require future use of the associated assets.

Adjustments to revenue and trade receivables

Syngenta's products are consumed mainly by growers. The timing and amount of cash inflows received by growers is impacted by a broad range of economic and political risks, including crop yields and prices, the availability of credit, and the cost of agricultural inputs such as the products sold by Syngenta and its competitors. The cash flows of distributors that supply Syngenta's products to growers and represent the majority of Syngenta's customers are also impacted by these factors. These distributors vary in size and nature from large publicly owned entities to small or medium sized owner-managed businesses. Syngenta's customer base reflects the geographical diversity of its operations, which encompass more than 90 countries and all significant agriculture areas. Considerable management effort and judgment is applied to actively manage and mitigate the risks to Syngenta from these factors and to determine the accounting estimates associated with them, which include:

- the estimated cost of incentive programs that provide rebates and discounts dependent upon achievement of sales targets, as well as cash discounts for punctual payment of accounts receivable. Syngenta records the estimated cost of these programs when the related sales are made, based on the programs' terms, market conditions and historical experience. At December 31, 2015, trade accounts payable includes \$1,549 million (2014: \$1,485 million) of accruals for rebates and returns.
- accruals for estimated product returns, which are based on contractual sales terms and on historical experience of actual returns where Syngenta considers these to be reliable estimates of future returns. Recognition of revenue and the related trade receivables is deferred in cases where past experience shows that actual returns can vary significantly from estimates. This may arise in market segments where the distribution channel holds several months' sales of Syngenta products at the reporting date, forecast consumption of those products by growers could be materially affected if market or weather conditions after the reporting date were significantly different from those expected and the volume of products returned by distributors varies with changes in grower consumption. In such cases, Syngenta estimates the amounts to be deferred by collecting from its distributors data that shows the quantities of Syngenta products held by them at the reporting date and applying average actual sales prices to those quantities. At December 31, 2014, \$437 million of revenue and trade receivables was deferred, of which \$372 million related to Brazil. In 2015, Syngenta changed its contractual sales terms in Brazil to reduce the flexibility of distributors to return crop protection products. This change, together with the introduction of enhanced processes for forecasting and handling product returns, reduced the uncertainty over the amount of sales returns that may ultimately occur. Sales made after the change in terms have been recognized in accordance with delivery terms, subject to an allowance for returns, which amounted to \$106 million at December 31, 2015. Substantially all sales made before the change have also been recognized in 2015 in line with distributors' sales of Syngenta products on to growers. The effect of earlier revenue recognition due to the change in contractual sales terms, as measured by the difference between the \$345 million balance of receivables that had not yet been recognized as sales at the date Syngenta announced the change to customers and the \$106 million sales returns provision at December 31, 2015, was \$239 million. Syngenta has estimated that the consequent effect on net income was \$80 million. At December 31, 2015, recognition of \$35 million of sales to distributors was deferred in certain other markets in Latin America, where the volume of returns is still subject to significant uncertainty.

2. Significant accounting policy judgments and estimates continued

- allowances for doubtful receivables, which are estimated by critically analyzing individual receivable account balances, taking into account historical levels of recovery and the value of any security held, the economic condition of individual customers, and the overall economic and political environment in relevant countries. As shown in Note 9 below, the provision for doubtful receivables at December 31, 2015 amounted to \$319 million, or 7 percent (2014: \$251 million or 6 percent) of total trade receivables, of which \$140 million and \$47 million (2014: \$67 million and \$33 million) related to sales made to the Brazilian and Argentinian markets respectively. In 2015, Syngenta reported \$75 million bad debt expense (2014: \$63 million). In 2015, oil and commodity price and local currency weakness led to greater constraints on the availability of credit and foreign currency at both customer and country level in Brazil, Venezuela and Argentina than in 2014. These factors, as well as general changes in local crop conditions, as mitigated by barter programs and appropriate security, resulted in higher bad debt expense, partly offset by improved collections in the CIS.

Syngenta records these estimates as separate allowances, but its estimation process recognizes their interdependency, as the level of credits to accounts receivable for discounts and product returns may affect the probability of receiving full payment of the net receivable balances.

Seeds inventory valuation and allowances

Inventories of \$4,345 million (2014: \$4,861 million) reported in Note 11 include \$1,252 million (2014: \$1,496 million) of seeds, which are subject to the risk of loss through physical deterioration at all stages of the operating cycle. Syngenta accounts for normal losses that occur during production, both in the pre-harvest growing and the post-harvest processing stages, as part of the cost of inventories of in-process and finished seeds. Normal losses in production, which include the cost of seeds discarded before processing because they do not meet Syngenta's quality standards, are therefore expensed when the related finished seed is sold to customers. Losses of finished seeds are expensed as incurred. Syngenta records allowances against the cost of seeds inventories for both quality and obsolescence. Syngenta records allowances for quality for finished seed which is currently of defective quality and for finished seed which is expected to deteriorate physically before sale, based on past experience. Syngenta records allowances for obsolescence for excess seed for which there is insufficient forecast customer demand over the expected remaining commercial life of each seed variety. For excess seeds that Syngenta is likely to be able to sell in the commodity market, the allowance is the cost of the seed minus its net realizable value, which is estimated as the expected net proceeds of commodity sale. If commodity sale is not probable, the allowance is the full cost of the excess seed inventories.

To determine the allowances required, management effort and judgment is applied to analyze at crop, variety and batch level seed inventory quantity, quality and forecast sales data, developing commercial practices, available markets and the speed of expected product portfolio changes. The rapidly evolving combination of corn seed genetics and trait stacks in North America and Latin America result in shorter commercial lives of a typical hybrid seed variety than in other crops and regions, with variation between actual and previously forecast sales and consequent greater risk of excess seed at individual hybrid level. Excess seed quantities are also affected by harvest yield, which is influenced by unpredictable weather and growing conditions. Seeds inventory allowance expense for 2015 was \$181 million (2014: \$177 million), with the impact of lower demand and soybean commodity prices compared to 2014 being offset by currency translation effects, and the allowance balances reduced from \$357 million at December 31, 2014 to \$279 million at December 31, 2015 due to discards of obsolete and unsaleable inventories and to currency translation.

Environmental provisions

At December 31, 2015, Syngenta reported in Note 19 provisions for environmental remediation of \$210 million (2014: \$239 million). Remediation of environmental damage at sites with which Syngenta is associated typically takes a long time to complete due to the substantial amount of planning and regulatory approvals normally required before remediation activities can begin. The assumptions used by Syngenta to estimate its environmental provisions may change significantly before or during the remediation period due to changes in the extent of remediation required or the method used to remediate the damage. In addition, increases in or releases of environmental provisions may be necessary whenever new developments occur or additional information becomes available. The major uncertainties that impact the outcome of remediation are:

- the extent of the contaminated land area, which is not always limited to land occupied by the Syngenta site. Ongoing monitoring or remediation work may identify changes in the area believed to be contaminated.
- the nature of the work Syngenta will be obliged to perform or pay for. This depends upon the current or proposed use of contaminated land, substantively enacted legislation, and land zoning by and negotiation with the relevant regulatory authorities. In Switzerland, proposed remediation plans at certain sites may be subject to public referenda.

2. Significant accounting policy judgments and estimates continued

- sharing of costs with other past and present occupiers of Syngenta’s sites. At certain shared sites, Syngenta is responsible for an agreed proportion of remediation costs, which may change following discussions with authorities and the affected third parties. At other sites, third parties have agreed to reimburse Syngenta for some or all of the costs it incurs.

Consequently, environmental provisions can change significantly. Because of the inherent uncertainties in estimating such long-term future obligations, Syngenta periodically supplements its internal expertise with external expertise when determining environmental provisions.

IAS 37 requires reimbursements of provisions to be recognized only when they are virtually certain to be received. No reimbursements are recognized if the third parties are disputing the reimbursement. Syngenta has recorded a reimbursement asset of \$2 million at December 31, 2015 (2014: \$3 million). In 2014, the reimbursement asset decreased by \$20 million in line with the associated underlying provision as described below, with no net effect on profit or loss.

In 2015, except for \$28 million of cash outflows reflecting remediation activity, there were no significant changes to environmental provisions. In 2014, environmental provisions of \$22 million were released, mainly in relation to a site covered by a third party indemnity agreement for which future payment is now estimated to be highly unlikely. In connection with this release, the above-mentioned \$20 million reimbursement recoverable from the previous owners of the site was derecognized. Cash payments and the effect of the stronger \$ on currency translation through OCI reduced the provisions by \$33 million and \$16 million, respectively.

Proposals have been made suggesting remediation of the existing contamination on certain shared sites in preference to monitoring and containment. Syngenta will negotiate the proposals with the relevant authorities but the final adopted solution is subject to regulatory uncertainty and the ultimate liability may be higher or lower than the amount provided. Taken together, the provisions at December 31, 2015, for these shared sites comprise approximately 20 percent of total environmental provisions. The top ten exposures at the end of 2015 comprise approximately 75 percent of the total environmental provisions. In the opinion of management, reasonably possible increases in the provisions related to these top 10 exposures would not exceed 60 percent of the total environmental provision recognized at December 31, 2015.

At Syngenta’s Monthey, Switzerland, production site, the work needed to remediate groundwater and soil contamination that exists under and around the site, including investigation, assessment, control and monitoring activities, is ongoing. The responsibility for these activities lies with Syngenta and one other chemical enterprise. In management’s opinion, based on its current knowledge, Syngenta’s environmental provisions are adequate to cover Syngenta’s share of the expected costs to perform this remediation and no significant change to the provision has been made in 2015. However, the extent of the remediation work required, the cost estimates and their allocation are subject to uncertainty.

Defined benefit post-employment benefits

At December 31, 2015, Syngenta has reported other non-current assets of \$21 million (2014: \$8 million) and provisions of \$408 million (2014: \$376 million) as net defined benefit (DB) pension assets and liabilities, respectively, as set out in Note 22. These amounts may change significantly from one accounting period end to another due not only to expense recognized in profit and loss and cash payments, but also to changes in the actuarial assumptions used to measure the defined benefit obligation (DBO) and to variances between those assumptions and actual outcomes (“experience variances”), both of which are recognized in OCI. Significant judgment is required when selecting key assumptions for measuring post-employment benefit expense for a period and the DBO at the period end for each defined benefit plan. The specific assumptions used and experience variances are disclosed in Note 22. These variances were caused principally by external financial market movements in corporate bond yields used to benchmark the discount rate, and in asset prices affecting the actual return on assets. These factors are outside Syngenta’s direct control, and it is reasonably possible that future variances will be at least as great as past variances.

At December 31, 2015 and 2014, for each of Syngenta’s three largest defined benefit pension plans, the sensitivity of the DBO to a change in each significant actuarial assumption is as follows:

(\$m)	2015			2014		
	Switzerland	UK	USA	Switzerland	UK	USA
Increase (decrease) in DBO						
Discount rate – 25 basis point decrease in rate	102	111	18	83	133	22
Discount rate – 25 basis point increase in rate	(96)	(109)	(17)	(77)	(131)	(21)
Pension increase – 25 basis point increase in rate	n/a	83	n/a	n/a	97	n/a
Pension increase – 25 basis point decrease in rate	n/a	(81)	n/a	n/a	(96)	n/a
Interest credit rate – 25 basis point increase in rate	22	n/a	n/a	20	n/a	n/a
Interest credit rate – 25 basis point decrease in rate	(21)	n/a	n/a	(21)	n/a	n/a
Life expectancy ¹	70	91	8	54	97	12

1 The life expectancy sensitivity is calculated using the difference between the reported DBO amount and the DBO amount projected using a one year increase, compared with the assumptions actually used, in the life expectancy for each plan member. This alternative projection is calculated using mortality rates that produce an immediate increase of one year for a plan member at normal retirement date, with corresponding changes at other ages.

Each sensitivity amount is calculated assuming that all other assumptions are held constant. It should be noted that economic factors and conditions often affect multiple assumptions simultaneously. For the UK pension plan, the discount rate and pension increase sensitivities shown are relative to price inflation, because limited price indexation of pensions in payment and deferred pension rights is required both by the Syngenta UK pension plan rules and by UK statutory pension regulations. For Syngenta’s Swiss and US plans, the sensitivities are for changes in the nominal discount rates, because the rules and statutory regulations applicable to those plans contain no inflation linkage and indexation of benefits to inflation is not general market practice in those countries. Syngenta is not able to predict the extent of likely future changes in the discount rate or life expectancy assumptions, but based on past experience, the discount rate for each plan could change by up to 100 basis points (bp) within a twelve month period. Pensionable pay is now permanently frozen for the UK DB pension plan as explained below, and the sensitivity of the DBO to the assumed rate of increase in pensionable pay is not material for the Swiss or US plans.

2. Significant accounting policy judgments and estimates continued

To select the discount rate, Syngenta uses yields of AA rated corporate bonds. The relevant yield is determined either by analyzing a population of bonds whose cash flows collectively approximate the estimated cash flow profile of benefit payments by a Syngenta plan (UK and USA), or by using the yield of a published bond index and adjusting it in line with the relevant market yield curve to the extent that the average maturity of the bonds in the index is different from that of the relevant Syngenta benefits (Switzerland). Nominal discount rates at December 31, 2015 are as follows:

Switzerland	0.75 percent	(2014: 1.25 percent)
UK	3.70 percent	(2014: 3.60 percent)
USA	4.35 percent	(2014: 4.00 percent)

In valuing the UK DBO at December 31, 2015, the UK long-term rate of retail price inflation (RPI) is assumed to be 3.05 percent (2014: 3.05 percent). Future statutory pension increases are based on consumer price inflation (CPI). Most Syngenta UK pension plan members have benefits specifically linked to RPI in accordance with the plan rules, but some members will see increases linked to CPI. CPI is assumed to be 100 basis points (2014: 100 basis points) below RPI.

In recent years, life expectancy has increased in all major countries in which Syngenta sponsors pension plans. Syngenta sets mortality assumptions after considering the most recent statistics practicable. Syngenta uses generational mortality tables to estimate probable future mortality improvements. These tables assume that the trend of increasing life expectancy will continue, resulting in pension benefit payments to younger members being likely to be paid for longer time periods than older members' pensions, given that assumed retirement ages are those defined in the rules of each plan. In 2015, as the Syngenta UK Pension Fund (UK Fund) underwent its triennial statutory valuation, Syngenta has updated its mortality assumptions and now uses current mortality rates based on the UK Institute and Faculty of Actuaries' CMI SAPS Pensioner Amounts Light tables reflecting long cohort improvements from 2002-2012, with assumed future improvement of 1.25 percent per annum in line with the CMI Core Projections model 2015 (2014: CMI Core Projections model 2014). Syngenta's adoption of these mortality assumptions reduced the benefit obligation by \$17 million (less than one percent). No significant changes to UK mortality assumptions were necessary in 2014.

At December 31, 2015 and 2014, Syngenta valued the benefit obligation for its Swiss pension plan using mortality assumptions from the BVG 2010 generational mortality table. An update of this table was published in December 2015. Because of this timing, Syngenta will consider the updated data for its 2016 financial statements. Syngenta's adoption of the BVG 2010 table in 2011 increased the DBO by \$66 million (4.4 percent). At December 31, 2015 and 2014, Syngenta valued the benefit obligation for its US pension plan using mortality assumptions from the RP-2014 generational mortality table published in October 2014 with modified Scale MP-2014 mortality improvements using a 0.5 percent per annum long-term improvement rate for all purposes other than calculation of lump sums. Syngenta's adoption of this table in 2014 increased the DBO by \$15 million (2.2 percent).

Syngenta's major pension plans give members lump sum or annuity benefit payment options. Syngenta values its pension liabilities on the assumption that the choices made by members who will retire in the future will be consistent with choices made by members who have retired recently. For the US pension plan, the benefit obligation has been valued assuming that current eligible members will take the lump sum option at normal retirement or other permissible commencement dates. This assumption is consistent with historical and expected future member choices.

From September to November 2014, Syngenta consulted with its UK employees and their representatives on proposals to freeze pensionable pay for defined benefit members of the UK pension plan. Following this consultation, Syngenta amended the benefits so that pensionable pay will be frozen at January 1, 2016 levels. The defined benefit fund remains open to existing members, and pay increases after January 1, 2016, which are not part of defined benefit pensionable pay will be pensionable under the Syngenta Group Personal Pension (GPP), a separate defined contribution plan, for those who choose to join. Employees who choose to leave the defined benefit section of the UK pension plan will also be able to join the GPP. As a result of this amendment to the defined benefit in the UK Fund, Syngenta recognized a \$143 million past service gain in the 2014 consolidated income statement. Syngenta estimated this gain using the following key actuarial assumptions at the date of the change to revalue its existing defined benefit obligation (DBO) and to measure the DBO for the amended benefit:

Discount rate: 3.8 percent
Inflation: 3.1 percent (RPI), 2.1 percent (CPI)
Mortality assumptions were the same as those used at December 31, 2014, described above
Opt-outs from defined benefit under the amended plan: 15 percent of members

Opt-outs were estimated by modeling and comparing for each individual member, based on the data held for pension administration, the benefits that will be payable to them if they opt out of and if they remain in defined benefit membership. This comparison was based on the following assumptions:

- amounts excluded from defined benefit pensionable pay are pensionable under the GPP;
- GPP annual investment returns are 4 percent;
- each member chooses the alternative that gives the highest benefit.

This gain amount is sensitive to the opt-out assumption. Had Syngenta assumed zero opt-outs, it would have recorded an additional \$14 million gain in the 2014 consolidated income statement. Actual member decisions may vary from the estimate and any variance will be accounted for as an actuarial gain or loss in OCI in 2016 and future years.

2. Significant accounting policy judgments and estimates continued

At December 31, 2015, Syngenta has reduced the opt-out assumption to 10 percent because during 2015 it agreed to increase benefit accrual rates for service in 2016 and future years, thus providing an additional incentive for existing members to remain in the defined benefit section of the plan. The effect of this change was not material.

Deferred tax assets

At December 31, 2015, Syngenta's deferred tax assets are \$783 million (2014: \$1,008 million), as further analysed in Note 7. Included in this balance are deferred tax assets for unused tax losses and tax credits of \$40 million (2014: \$38 million). The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible or in which tax losses can be utilized. The tax effect of unused tax losses is recognized as a deferred tax asset when it becomes probable that the tax losses will be utilized. In making assessments regarding deferred tax assets, management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies. At December 31, 2015, based upon the level of historical taxable income and projections for future taxable income over the periods in which deferred tax assets are deductible, management believes that it is more likely than not that Syngenta will realize the benefits of these deductible differences. The amount of deferred tax assets considered realizable could however be reduced in subsequent years if estimates of future taxable income during their carry forward periods are reduced, or rulings by the tax authorities are unfavorable. Estimates are therefore subject to change due to both market related and government related uncertainties, as well as Syngenta's own future decisions on restructuring and other matters. Syngenta is unable to accurately quantify the future adjustments to deferred income tax expense that may occur as a result of these uncertainties.

The principal jurisdictions where deferred tax assets have not been recognized are Argentina, Belgium and Brazil (2014: Argentina, Russia and Ukraine). For Argentina, no net deferred tax assets have been recognized at December 31, 2015 or 2014. Non recognition in Belgium relates to the impact of post-acquisition integration of Devgen on actual tax losses and expected future taxable profits. For Russia and Ukraine, the criteria for recognizing deferred tax assets were not met at December 31, 2014, because of local currency weakness and developments in the economic and political environment during 2014, but are met at December 31, 2015 because of improved local profitability. At December 31, 2014, net deferred tax assets in Brazil were fully recognized. Local profitability in Brazil was reduced in 2015 by challenging market conditions and local currency weakness, both of which are expected to continue in 2016. As a result, future taxable profits are expected to be lower than was estimated in 2014 and are no longer sufficient to recognize the deferred tax asset in full. In making this assessment, for one Syngenta main subsidiary in Brazil, the forecast horizon used for taxable profits is 5 years. During this period, Syngenta has projected that local profitability will recover from current levels but will not achieve the levels forecast in 2014. Taxable profits that may arise beyond the 5 year horizon are subject to greater uncertainty and have not been considered. Consequently, for Brazil, at December 31, 2015 Syngenta has recognized \$167 million of net deferred tax assets and has not recognized \$46 million of deferred tax assets.

Uncertain tax positions

Syngenta's supply chain is international, and intellectual property rights owned by Syngenta are used internationally within the Group. Transfer prices for the delivery of goods and charges for the provision of services by one Syngenta subsidiary to another, and arrangements to share research and development costs, may be subject to challenge by the national tax authorities in any of the jurisdictions in which Syngenta operates. Interpretation of taxation rules relating to financing arrangements between Syngenta entities and to foreign currency translation differences may also give rise to uncertain tax positions. Where a distribution of subsidiary retained earnings would incur withholding taxes, Syngenta also makes a management judgment as to whether a future distribution is probable.

Syngenta estimates and accrues taxes that will ultimately be payable when reviews or audits by tax authorities of tax returns are completed. These estimates include significant management judgments about the eventual outcome of the reviews and audits of all open years based on the latest information available about the positions expected to be taken by each tax authority. Actual outcomes and settlements may differ significantly from the estimates recorded in these consolidated financial statements. This may affect income tax expense reported in future years' consolidated income statements. At December 31, 2015, Syngenta's balance sheet includes assets of \$124 million (2014: \$89 million) included within other accounts receivable, and liabilities of \$444 million (2014: \$706 million) shown separately on the face of the balance sheet, for current income taxes. These liabilities include \$382 million in respect of the uncertain tax positions described above (2014: \$381 million). The liability for uncertain income tax positions that Syngenta expects will be resolved in 2016 is approximately 12 percent of total recognized current income tax liabilities.

3. Acquisitions, divestments and other significant transactions

The following significant transactions occurred during 2015, 2014 and 2013.

2015

On October 15, 2015, Syngenta acquired 100 percent of the shares of Land.db Enterprises Inc. in exchange for cash, including contingent consideration. The primary reason for the acquisition was to gain exclusive control of the AgriEdge Excelsior[®] farm management software program, which integrates products, services, risk management and technology for growers. The assets, liabilities, acquisition-date fair value of consideration and related costs for the acquisition are not material. Due to on-going valuation activity, the amounts recognized are all provisional.

Payments and receipts in 2015 of deferred and contingent consideration related to acquisitions and divestments completed in prior periods were not material.

2014

On April 4, 2014, Syngenta acquired 100 percent of the shares of Società Produttori Sementi S.p.A. ("PSB") in exchange for cash. PSB is one of Italy's oldest seed companies and a leader in durum wheat breeding and production. The primary reasons for the acquisition were to gain access to PSB's durum wheat breeding expertise and its links to the food industry, which will be complemented by Syngenta's cereals research and development and global presence. Goodwill was \$6 million, which represents commercial and research and development synergies resulting from integrating PSB's business into Syngenta's operations and the enabling of expansion in the cereals seed market.

On July 21, 2014, Syngenta acquired the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, the Swedish food, energy and agriculture group, in exchange for cash. The acquired business consists of 100 percent of the shares of Lantmännen SW Seed Hadmersleben GmbH, Lantmännen SW Seed GmbH, SW Winter Oilseed AB and certain sites in Germany. The primary reasons for the acquisition were to give Syngenta access to high-quality germplasm, a seeds pipeline and commercial varieties which complement Syngenta's portfolio and will support the continued development of hybrid cereals for growers worldwide. Goodwill was \$12 million and mainly represents synergies expected in combining operations for the breeding and commercialization of high performing cereals and oilseed rape varieties. Measurement period adjustments to the provisional asset and liability amounts recognized at December 31, 2014 were not material.

The assets, liabilities and acquisition-date fair value of consideration recognized for these 2014 acquisitions are as follows:

(\$m)	
Property, plant and equipment	56
Intangible assets	46
Other assets	37
Deferred tax liabilities	(19)
Other liabilities	(54)
Net assets acquired	66
Purchase price	84
Goodwill	18

Costs related to these acquisitions were not material.

Cash flow from these 2014 acquisitions was as follows:

(\$m)	
Total cash paid for shares	84
Net cash acquired	(4)
Net cash outflow	80

Payments and receipts in 2014 of deferred and contingent consideration related to acquisitions and divestments completed in prior periods were not material.

2013

On October 31, 2013, Syngenta acquired 100 percent of the shares of MRI Seed Zambia Ltd. ("MRI Seed") and MRI Agro Zambia Ltd. ("MRI Agro") (collectively "MRI") for \$88 million in cash. MRI is a leading developer, producer and distributor of white corn seed in Zambia. Goodwill was \$22 million and mainly represents commercial synergies resulting from integrating MRI's business into Syngenta's operations.

3. Acquisitions, divestments and other significant transactions continued

The assets, liabilities and acquisition-date fair value of consideration recognized for this 2013 business combination were as follows.

(\$m)	
Intangible assets	49
Other assets	48
Deferred tax and other liabilities	(31)
Net assets acquired	66
Purchase price	88
Goodwill	22

Costs related to the MRI acquisition were not material.

Cash flow from the MRI acquisition was as follows:

(\$m)	
Total cash paid for shares	88
Net cash acquired	(4)
Net cash outflow	84

Payments and receipts in 2013 of deferred and contingent consideration related to acquisitions and divestments completed in prior periods were \$20 million and \$9 million, respectively.

On January 30 and March 8, 2013, Syngenta acquired the remaining equity interests in deVGen N.V. ("Devgen") that it did not already own after its initial takeover offer was settled in December 2012. This was accounted for as a settlement of the liability Syngenta had recognized at December 31, 2012 for non-controlling shareholders' put rights. On December 23, 2013, Syngenta acquired the remaining 15 percent equity interest in its Malaysian subsidiary, Syngenta Crop Protection Sdn Bhd that it did not already own. Cash paid for these non-controlling interests was \$39 million. This amount is shown within cash flows used for financing activities in the consolidated cash flow statement.

On December 31, 2013, Syngenta divested its Dulcinea Farms business to Pacific Trellis Fruit LLC, a US-based international grower and marketer of fresh produce.

4. Segmental breakdown of key figures for the years ended December 31, 2015, 2014 and 2013

Syngenta is organized on a worldwide basis into five operating segments: the four geographic regions, comprising the integrated Crop Protection and Seeds business, and the global Lawn and Garden business. Income and expense transactions in the integrated business have been attributed to the geographic regions based on the market destination to which they relate, rather than on the region in which they originated. Some costs of the integrated organization do not relate to a geographic destination and are reported as non-regional. Segment performance is managed based on segment operating income, which is the measure of segment profit or loss presented, and is based on the same accounting policies as consolidated operating income. No operating segments have been aggregated to form the reportable segments.

2015 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Group
Product sales – to third parties	3,843	3,117	3,569	1,830	-	12,359	645	13,004
Royalty and license income – from third parties	41	293	63	7	-	404	3	407
Total segment sales	3,884	3,410	3,632	1,837	-	12,763	648	13,411
Cost of goods sold	(1,889)	(1,779)	(2,118)	(1,012)	54	(6,744)	(298)	(7,042)
Gross profit	1,995	1,631	1,514	825	54	6,019	350	6,369
Marketing and distribution	(586)	(537)	(557)	(286)	(83)	(2,049)	(161)	(2,210)
Research and development	-	-	-	-	(1,310)	(1,310)	(52)	(1,362)
General and administrative:								
Restructuring	(128)	(37)	(28)	(20)	(168)	(381)	(7)	(388)
Other general and administrative	(126)	(84)	(39)	(35)	(274)	(558)	(10)	(568)
Operating income/(loss) – continuing operations	1,155	973	890	484	(1,781)	1,721	120	1,841
Included in the above operating income from continuing operations are:								
Personnel costs	(590)	(446)	(469)	(267)	(1,042)	(2,814)	(158)	(2,972)
Depreciation of property, plant and equipment					(332)	(332)	(17)	(349)
Amortization of intangible assets					(175)	(175)	(15)	(190)
Impairment of property, plant and equipment, intangible and financial assets	(3)	(11)		(1)	(51)	(66)	-	(66)
Other non-cash items including charges in respect of provisions					(270)	(270)	(15)	(285)
Gains/(losses) on hedges reported in operating income	1	(14)	30	-	(31)	(14)	24	10

During 2015, Syngenta refined its method for allocating personnel costs to segments for disclosure purposes to take advantage of improved availability of personnel cost data. This had no impact on segment operating income.

Segment operating income/(loss) reconciles to consolidated income before taxes as follows:

2015 (\$m)	
Segment operating income	1,841
Income from associates and joint ventures	7
Financial expense, net	(256)
Income before taxes	1,592

4. Segmental breakdown of key figures for the years ended December 31, 2015, 2014 and 2013 continued

2014 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Group
Product sales – to third parties	4,492	3,458	4,273	2,024	–	14,247	690	14,937
Royalty and license income – from third parties	55	124	6	9	–	194	3	197
Total segment sales	4,547	3,582	4,279	2,033	–	14,441	693	15,134
Cost of goods sold	(2,180)	(2,003)	(2,492)	(1,107)	(92)	(7,874)	(318)	(8,192)
Gross profit	2,367	1,579	1,787	926	(92)	6,567	375	6,942
Marketing and distribution	(720)	(564)	(615)	(314)	(110)	(2,323)	(174)	(2,497)
Research and development	–	–	–	–	(1,376)	(1,376)	(54)	(1,430)
General and administrative:								
Restructuring	(30)	(22)	(26)	(4)	(96)	(178)	(15)	(193)
Other general and administrative	(161)	(92)	(77)	(48)	(307)	(685)	(32)	(717)
Operating income/(loss) – continuing operations	1,456	901	1,069	560	(1,981)	2,005	100	2,105
Included in the above operating income from continuing operations are:								
Personnel costs	(651)	(473)	(536)	(304)	(696)	(2,660)	(144)	(2,804)
Depreciation of property, plant and equipment					(348)	(348)	(17)	(365)
Amortization of intangible assets					(227)	(227)	(16)	(243)
Impairment of property, plant and equipment, intangible and financial assets					(24)	(24)	(1)	(25)
Other non-cash items including charges in respect of provisions					(83)	(83)	(7)	(90)
Gains/(losses) on hedges reported in operating income	(1)	1	(11)	–	16	5	8	13

Segment operating income/(loss) reconciles to consolidated income before taxes as follows:

2014 (\$m)	
Segment operating income	2,105
Income from associates and joint ventures	7
Financial expense, net	(217)
Income before taxes	1,895

4. Segmental breakdown of key figures for the years ended December 31, 2015, 2014 and 2013 continued

2013 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Group
Product sales – to third parties	4,184	3,709	3,987	1,931	–	13,811	688	14,499
Royalty and license income – from third parties	39	139	4	4	–	186	3	189
Total segment sales	4,223	3,848	3,991	1,935	–	13,997	691	14,688
Cost of goods sold	(1,958)	(2,169)	(2,290)	(1,041)	(215)	(7,673)	(313)	(7,986)
Gross profit	2,265	1,679	1,701	894	(215)	6,324	378	6,702
Marketing and distribution	(676)	(544)	(594)	(300)	(104)	(2,218)	(176)	(2,394)
Research and development	–	–	–	–	(1,320)	(1,320)	(56)	(1,376)
General and administrative:								
Restructuring	(18)	(27)	(5)	(6)	(101)	(157)	(22)	(179)
Other general and administrative	(141)	(61)	(87)	(54)	(297)	(640)	(27)	(667)
Operating income/(loss) – continuing operations	1,430	1,047	1,015	534	(2,037)	1,989	97	2,086
Included in the above operating income from continuing operations are:								
Personnel costs	(541)	(449)	(475)	(266)	(706)	(2,437)	(158)	(2,595)
Depreciation of property, plant and equipment					(320)	(320)	(18)	(338)
Amortization of intangible assets					(238)	(238)	(17)	(255)
Impairment of property, plant and equipment, intangible and financial assets					(34)	(34)	–	(34)
Other non-cash items including charges in respect of provisions					(61)	(61)	(11)	(72)
Gains/(losses) on hedges reported in operating income	–	(14)	25	–	(18)	(7)	15	8

Segment operating income/(loss) reconciles to consolidated income before taxes as follows:

2013 (\$m)	
Segment operating income	2,086
Income from associates and joint ventures	48
Financial expense, net	(200)
Income before taxes	1,934

4. Segmental breakdown of key figures for the years ended December 31, 2015, 2014 and 2013 continued

Revenues by product group for the years ended December 31, 2015, 2014 and 2013 are as follows:

(\$m)	2015	2014	2013
Crop Protection	9,925	11,286	10,793
Seeds	2,838	3,155	3,204
Lawn and Garden	648	693	691
Total	13,411	15,134	14,688

Summarized additional information on the nature of expenses for the years ended December 31, 2015, 2014 and 2013 is as follows:

(\$m)	2015	2014	2013
Salaries, short-term employee benefits and other personnel expense	2,685	2,733	2,374
Pension and other post-employment benefit expense	220	8	141
Share based payment expense	67	63	80
Total personnel costs	2,972	2,804	2,595
Depreciation of property, plant and equipment	349	365	338
Impairment of property, plant and equipment	43	21	–
Amortization of intangible assets	190	243	255
Impairment of intangible assets	22	–	23

Pension and other post-employment benefit expense for 2015 includes \$10 million of losses on amendment and settlement of pension plans (2014: gains of \$175 million; 2013: gains of \$41 million), recognized within General and administrative and allocated across the segments (2014: Cost of goods sold \$93 million; Marketing and distribution \$11 million; Research and development \$49 million; and General and administrative \$22 million. These gains were included within Non-regional, except for immaterial amounts; 2013: General and administrative, and Non-regional). Further information relating to these gains is given in Notes 2 and 22.

5. Regional breakdown of key figures for the years ended December 31, 2015, 2014 and 2013

The following countries individually accounted for more than 5 percent of one or more of the respective Syngenta totals for the years ended December 31, 2015, 2014 and 2013 or at December 31, 2015 and 2014.

(\$m, except %)	Sales ¹						Total non-current assets ²			
	2015	%	2014	%	2013	%	2015	%	2014	%
Brazil	2,519	19	2,945	19	2,715	18	226	3	268	4
France	605	4	743	5	684	5	128	2	144	2
Switzerland	63	–	69	–	70	–	2,680	39	2,827	38
UK	204	2	239	2	190	1	530	8	567	8
USA	3,303	25	3,292	22	3,486	24	1,968	28	1,894	26
Others	6,717	50	7,846	52	7,543	52	1,400	20	1,620	22
Total	13,411	100	15,134	100	14,688	100	6,932	100	7,320	100

1 Sales by location of third party customer

2 Excluding deferred tax assets, defined benefit pension assets and derivative financial assets

No single customer accounted for 10 percent or more of Syngenta's total sales.

6. Restructuring

Restructuring for the years ended December 31, 2015, 2014 and 2013, broken down into the main restructuring initiatives, consists of the following:

(\$m)	2015	2014	2013
Accelerating operational leverage programs:			
Cash costs			
Charged to provisions	166	7	–
Expensed as incurred	62	42	–
Pension curtailment gain	(21)	–	–
Non-cash costs			
Impairments	33	14	–
Integrated crop strategy programs:			
Cash costs			
Charged to provisions	6	17	7
Expensed as incurred	21	44	53
Operational efficiency programs:			
Cash costs			
Charged to provisions	–	1	6
Expensed as incurred	–	17	27
Non-cash costs			
Impairments	–	–	6
Acquisition, divestment and related costs:			
Cash costs			
Charged to provisions	–	2	–
Expensed as incurred	91	25	30
Non-cash items			
Fixed asset impairment	1	–	–
Reversal of inventory step-ups	–	13	–
Reacquired rights	–	–	11
Divestment losses	–	–	4
Other non-cash restructuring:			
Non-current asset impairment	29	24	35
Total restructuring	388	206	179

Restructuring for the years ended December 31, 2015, 2014 and 2013 is presented within the consolidated income statement as follows:

(\$m)	2015	2014	2013
Reported as:			
Cost of goods sold	–	13	–
General and administrative	388	193	179
Total restructuring	388	206	179

6. Restructuring continued

2015

Accelerating operational leverage programs

Cash costs of \$228 million, including \$127 million of severance and pension charges, consist of \$77 million for initiatives to restructure marketing and commercial operations, \$43 million for projects to drive efficiencies in territory commercial operations, \$48 million to rationalize logistical operations and optimize production capacity, \$36 million for Research and Development productivity projects, \$17 million for projects to increase the effectiveness of back office support services and \$7 million for project management. The pension curtailment gain consists of the difference between the cash contributions payable on early retirements and the calculation of net pension curtailment costs according to IFRS, with regards to the Swiss defined benefit pension plan. Cash costs for early retirements are included in the cash costs of various projects described above. Non-cash impairment costs of \$33 million consist of tangible asset write-downs at three sites resulting from projects to rationalize logistical operations and optimize production capacity.

Integrated crop strategy programs

Cash costs of \$27 million include \$20 million of charges for the transfer of certain system and process management activities to the internal service center in India, including \$11 million for information system projects, \$1 million to restructure the integrated Research and Development function, \$1 million to restructure the Human Resource organization and \$5 million of corporate headquarter and other costs.

Acquisition, divestment and related costs

Cash costs of \$91 million include \$8 million incurred to integrate previous acquisitions, mainly the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen, PSB and MRI. A further \$83 million represents transaction charges, including costs related to potential industry consolidation transactions, such as the proposals received from Monsanto Company, as well as costs associated with the separation and planned divestment of the Flowers and Vegetables Seeds businesses announced during 2015. The impairment relates to fixed assets acquired with the German and Polish winter wheat and winter oilseed rape breeding and business operations of Lantmännen.

Other non-cash restructuring

Other non-current asset impairment of \$29 million includes \$20 million to impair the assets of a seeds crop where expectations of future operating profitability have reduced, \$7 million of impairment of exclusive distribution rights where the distribution agreement has been terminated and \$2 million for two other intangible asset impairments.

2014

Accelerating operational leverage programs

In February 2014, Syngenta commenced the restructuring program to drive further improvements in operating income margins and accelerate delivery of operational leverage as sales grow. 2014 cash costs of \$49 million included \$14 million for initiatives to restructure marketing and commercial operations, \$13 million for projects to drive efficiencies in territory commercial operations, particularly in Latin America, \$11 million to rationalize logistical operations and optimize production capacity, \$5 million for Research and Development productivity projects, and \$6 million for project management. Non-cash charges consisted of \$1 million for the impairment of a site, which is closed, and \$13 million for inventory write-downs due to a significant rationalization of the Vegetables product range.

Integrated crop strategy programs

Cash costs of \$61 million included \$24 million of charges for the transfer of certain system and process management activities to a new internal service center in India, including severance and pension costs of \$11 million, \$25 million for the development and rollout of processes and training programs for marketing the integrated Crop Protection and Seeds product offers and related commercial reorganization, \$4 million for information system projects, \$4 million to restructure the integrated Research and Development function, \$2 million to restructure the Human Resource organization and \$2 million for legal entity rationalization projects.

Operational efficiency programs

The operational efficiency restructuring programs announced in 2004 and 2007 were substantially complete. The final expenditures of \$18 million in 2014 largely related to the rollout of standardized and outsourced human resource support services.

Acquisition, divestment and related costs

Cash costs of \$27 million included \$21 million incurred to integrate previous acquisitions, mainly Devgen, MRI, PSB, and the Polish and German winter wheat and oilseed rape breeding and business operations of Lantmännen. A further \$6 million consisted of transaction costs, including those related to uncompleted transactions. Reversal of inventory step-up related to the MRI and PSB acquisitions.

Other non-cash restructuring

Other non-cash restructuring consisted of \$20 million of fixed asset impairments, including \$14 million for plant and machinery in Brazil and Canada due to significant changes in production processes and \$6 million for development costs of major plant expansion projects that were subsequently aborted, and \$4 million for the impairment of loan notes related to strategic venture capital investments.

6. Restructuring continued

2013

Integrated crop strategy programs

Cash costs of \$60 million included \$27 million of charges for consultancy and advisory services, re-training of employees and project management, \$17 million for information system infrastructure projects, \$8 million for legal entity merger projects to combine former Seeds and Crop Protection legal entities, \$6 million to restructure the Research and Development function and \$2 million for integration of marketing and sales operations, mainly in Europe.

Operational efficiency programs

Operational efficiency cash costs of \$33 million included \$18 million related to the completion of the projects to standardize and consolidate global back office operations, \$9 million for restructuring projects in the Flowers business and \$6 million for various projects including restructuring at the corporate headquarters and outsourcing of human resources support. Non-cash impairment costs consisted of exceptional inventory write-downs made in connection with a restructuring of the Flowers product range to simplify the business and eliminate unprofitable varieties.

Acquisition, divestment and related costs

Cash costs of \$30 million included \$23 million to integrate previous acquisitions, mainly Devgen, Sunfield and Pasteuria, and \$7 million of transaction charges, including those related to uncompleted transactions.

As part of the Greenleaf acquisition in 2010, Syngenta reacquired exclusive licensing rights that it had previously granted to Greenleaf. In accordance with IFRS, the reacquired rights were recognized as an intangible asset and have been amortized over the remaining term of the original license contract, 3 years. Divestment losses related to the 2013 divestment of the Dulcinea vegetables business and the sale of an unused site in North America, as well as closing adjustments to the fair value of the consideration on the 2012 divestments of the Syngenta Horticultural Services business and the Fafard peat unit.

Other non-cash restructuring

Other non-current asset impairments included \$12 million for the impairment of a financial asset and \$23 million of intangible asset impairments. Intangible asset impairments included \$16 million to impair product rights acquired with the Devgen acquisition, which will not be used in Syngenta and for which no buyer was found, \$6 million for the impairment of a trademark, phased out during 2013, and another small impairment.

7. Income taxes

Income before taxes from continuing operations for the years ended December 31, 2015, 2014 and 2013 consists of the following:

(\$m)	2015	2014	2013
Switzerland	849	624	1,241
Foreign	743	1,271	693
Total income before taxes	1,592	1,895	1,934

Income tax (expense)/benefit on income from continuing operations for the years ended December 31, 2015, 2014 and 2013 consists of the following:

(\$m)	2015	2014	2013
Current income tax (expense):			
Switzerland	(47)	(99)	(88)
Foreign	(117)	(355)	(281)
Total current income tax (expense)	(164)	(454)	(369)
Deferred income tax (expense)/benefit:			
Switzerland	(4)	60	(39)
Foreign	(80)	121	123
Total deferred income tax (expense)/benefit	(84)	181	84
Total income tax (expense):			
Switzerland	(51)	(39)	(127)
Foreign	(197)	(234)	(158)
Total income tax (expense)	(248)	(273)	(285)

7. Income taxes continued

The components of current income tax (expense) on income from continuing operations for the years ended December 31, 2015, 2014 and 2013 are:

(\$m)	2015	2014	2013
Current tax (expense) relating to current years	(271)	(521)	(406)
Adjustments to current tax for prior periods	90	10	10
Utilization of tax losses against taxable income	15	54	26
Benefit of previously unrecognized tax losses	2	3	1
Total current income tax (expense)	(164)	(454)	(369)

The components of deferred income tax (expense)/benefit on income from continuing operations for the years ended December 31, 2015, 2014 and 2013 are:

(\$m)	2015	2014	2013
Origination and reversal of temporary differences	27	272	93
Changes in tax rates or legislation	5	4	34
Other adjustments to deferred tax for prior periods	(50)	–	–
Utilization of tax losses previously recognized as deferred tax assets	(15)	(54)	(26)
Benefit of previously unrecognized deferred tax assets	34	22	2
Non recognition of deferred tax assets	(85)	(63)	(19)
Total deferred income tax (expense)/benefit	(84)	181	84

OCI and Income tax relating thereto, for each component of equity, for the years ended December 31, 2015, 2014 and 2013 is as follows:

(\$m)	2015			2014			2013		
	Pre-tax	Tax	Post-tax	Pre-tax	Tax	Post-tax	Pre-tax	Tax	Post-tax
Items that will not be reclassified to profit or loss:									
Fair value reserves: Equity investments at fair value through OCI	(3)	(1)	(4)	(33)	4	(29)	17	(3)	14
Retained earnings: Actuarial gains/(losses)	(61)	11	(50)	(511)	123	(388)	146	(55)	91
Items that may be reclassified to profit or loss:									
Fair value reserves: Cash flow and net investment hedges	38	(10)	28	(37)	5	(32)	14	(11)	3
Currency translation effects	(698)	(64)	(762)	(625)	(70)	(695)	(39)	(48)	(87)
Total	(724)	(64)	(788)	(1,206)	62	(1,144)	138	(117)	21

The following tax was (charged)/credited to shareholders' equity for the years ended December 31, 2015, 2014 and 2013:

(\$m)	2015	2014	2013
Current tax ¹	12	(1)	4
Deferred tax ¹	(3)	(5)	(3)
Total income tax (charged)/credited to equity	9	(6)	1

¹ Current and deferred tax related to share based payments

7. Income taxes continued

Analysis of tax rate

The table below presents the main elements causing Syngenta's effective tax rate to differ from the statutory tax rate for the years ended December 31, 2015, 2014 and 2013. Syngenta's statutory rate consists of the domestic Swiss tax rate. Syngenta applies the domestic Swiss tax rate as it is more meaningful than using the weighted average tax rate.

The domestic Swiss tax rate consists of the Swiss federal income tax rate (8.50 percent) and the income tax rate of the canton Basel (20.00 percent). Federal and canton tax rates are deductible from the tax basis, therefore the Swiss domestic tax rate is 22.18 percent in 2015, 2014 and 2013.

	2015 %	2014 %	2013 %
Statutory tax rate	22	22	22
Effect of income taxed at different rates	(8)	(4)	(7)
Tax deduction for amortization and impairments not recognized for IFRS	(2)	(3)	(1)
Effect of other disallowed expenditures and income not subject to tax	(3)	(1)	(1)
Effect of changes in tax rates and laws on previously recognized deferred tax assets and liabilities	–	–	(2)
Effect of recognition of previously unrecognized deferred tax assets	(2)	(1)	–
Changes in prior year estimates and other items	4	(2)	3
Effect of non-recognition of deferred tax assets	5	3	1
Effective tax rate	16	14	15

Effect of income taxed at different rates includes rate differences from the domestic Swiss tax rate attributable to income generated from intellectual property that is taxed at reduced rates and the effect of lower tax rates in certain countries with regard to treasury, investment, group funding and regional management activities as well as logistical operations management. In most of these countries, Syngenta has entered into advanced pricing agreements.

The movements in deferred tax assets and liabilities during the year ended December 31, 2015 are as follows:

2015 (\$m)	January 1	Recognized in net income	Recognized in equity and OCI	Currency translation effects	Other movements and acquisitions	December 31
Assets associated with:						
Inventories	544	5	(100)	(36)	–	413
Accounts receivable	264	(40)	–	(45)	–	179
Pensions and employee costs	161	9	8	(16)	(1)	161
Provisions	342	30	–	(32)	(2)	338
Unused tax losses	38	–	–	4	(2)	40
Financial instruments, including derivatives	21	(5)	–	2	–	18
Other	24	6	–	(9)	15	36
Deferred tax assets	1,394	5	(92)	(132)	10	1,185
Liabilities associated with:						
Property, plant and equipment	(322)	(19)	–	5	(9)	(345)
Intangible assets	(293)	19	–	5	(8)	(277)
Inventories	(147)	(24)	35	32	–	(104)
Financial instruments, including derivatives	(42)	(1)	1	–	–	(42)
Other provisions and accruals	(183)	(13)	–	1	–	(195)
Other	(64)	(51)	–	7	1	(107)
Deferred tax liabilities	(1,051)	(89)	36	50	(16)	(1,070)
Net deferred tax asset/(liability)	343	(84)	(56)	(82)	(6)	115

7. Income taxes continued

The movements in deferred tax assets and liabilities during the year ended December 31, 2014 are as follows:

2014 (\$m)	January 1	Recognized in net income	Recognized in equity and OCI	Currency translation effects	Other movements and acquisitions	December 31
Assets associated with:						
Inventories	622	16	(72)	(20)	(2)	544
Accounts receivable	242	65	–	(43)	–	264
Pensions and employee costs	96	(45)	118	(8)	–	161
Provisions	269	100	–	(27)	–	342
Unused tax losses	90	(54)	–	(2)	4	38
Financial instruments, including derivatives	14	(1)	2	–	6	21
Other	7	(6)	–	23	–	24
Deferred tax assets	1,340	75	48	(77)	8	1,394
Liabilities associated with:						
Property, plant and equipment	(327)	–	–	15	(10)	(322)
Intangible assets	(282)	8	–	10	(29)	(293)
Inventories	(162)	(14)	–	33	(4)	(147)
Financial instruments, including derivatives	(19)	6	(23)	–	(6)	(42)
Other provisions and accruals	(325)	121	–	21	–	(183)
Other	(59)	(15)	4	6	–	(64)
Deferred tax liabilities	(1,174)	106	(19)	85	(49)	(1,051)
Net deferred tax asset/(liability)	166	181	29	8	(41)	343

The deferred tax assets and liabilities at December 31, 2015 and 2014 reconcile to the amounts presented in the consolidated balance sheet as follows:

(\$m)	2015	2014
Deferred tax assets	1,185	1,394
Adjustment to offset deferred tax assets and liabilities ¹	(402)	(386)
Adjusted deferred tax assets	783	1,008
Deferred tax liabilities	(1,070)	(1,051)
Adjustment to offset deferred tax assets and liabilities ¹	402	386
Adjusted deferred tax liabilities	(668)	(665)

¹ Deferred tax assets and liabilities relating to income taxes levied by the same taxation authority on the same taxable entity or on entities which intend to settle current tax assets and liabilities on a net basis or to realize the assets and settle the liabilities simultaneously are offset for presentation on the face of the consolidated balance sheet where a legal right of set-off exists

The gross value at December 31, 2015 and 2014 of unused tax loss carry forwards for which no deferred tax asset has been recognized, by expiration date, is as follows:

(\$m)	2015	2014
One year	2	3
Two years	2	3
Three years	–	6
Four years	3	4
Five years	13	5
More than five years	772	614
No expiry	64	12
Total	856	647

The above losses consist mainly of US state tax loss carry forwards. The applicable tax rate for these US state tax carry forwards is 5 percent of the gross amounts.

Deferred tax assets, other than those related to unused tax losses, are not subject to expiry.

7. Income taxes continued

A deferred tax asset or liability has not been recognized at December 31, 2015 and 2014 on the following items:

(\$m)	2015	2014
Temporary differences for which no deferred tax assets have been recognized	342	373
Temporary differences associated with investments in subsidiaries for which deferred tax liabilities have not been recognized	695	822

There are no income tax consequences for Syngenta of paying a dividend to its shareholders.

8. Earnings per share

Basic earnings per share amounts are calculated by dividing net income for the year attributable to ordinary shareholders of Syngenta AG by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net income attributable to ordinary shareholders of Syngenta AG by the sum of the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares. For each year presented, unvested share awards subject to Syngenta specific performance conditions are included in potential ordinary shares only if those conditions would have been met based on cumulative actual performance from the start of the performance period up to December 31 in the year concerned.

Treasury shares are deducted from total shares in issue for the purposes of calculating earnings per share.

The calculation of diluted earnings per share for the year ended December 31, 2015 excluded 713,803 (2014: 588,865; 2013: 261,854) of Syngenta AG shares and options granted to employees, as their inclusion would have been antidilutive.

(\$m, except number of shares)	2015	2014	2013
Net income attributable to Syngenta AG shareholders	1,339	1,619	1,644
Weighted average number of shares			
Weighted average number of shares – basic	91,908,128	91,674,127	91,952,222
Adjustments for dilutive potential ordinary shares:			
Grants of options over Syngenta AG shares under employee share participation plans	120,317	116,338	257,161
Grants of Syngenta AG shares under employee share participation plans	178,090	216,624	249,923
Weighted average number of shares – diluted	92,206,535	92,007,089	92,459,306

9. Trade and other accounts receivable

Trade receivables at December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
Trade receivables, gross	4,447	3,949
Provision for doubtful trade receivables	(319)	(251)
Trade receivables, net	4,128	3,698

Movements in the provision for doubtful trade receivables for the years ended December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
January 1	(251)	(226)
Amounts charged to income	(75)	(63)
Amounts written off	7	13
Currency translation effects and other	-	25
December 31	(319)	(251)

9. Trade and other accounts receivable continued

The ages of trade and other accounts receivable at December 31, 2015 and 2014 that were past due, but not impaired, are as follows:

	Total past due	0–90 days	90–180 days	More than 180 days
2015 (\$m)				
Trade receivables, gross	670	277	109	284
Provision for doubtful trade receivables	(259)	(8)	(26)	(225)
Other accounts receivable	395	277	49	69
Total	806	546	132	128
2014 (\$m)				
Trade receivables, gross	575	306	91	178
Provision for doubtful trade receivables	(184)	(9)	(26)	(149)
Other accounts receivable	332	182	18	132
Total	723	479	83	161

At the reporting date there are no indications that debtors whose accounts are neither overdue nor impaired will not meet their payment obligations. The carrying amount of trade receivables includes \$46 million (2014: \$35 million) that are due more than one year from the balance sheet date.

The carrying amount of trade receivables transferred in full and partial recourse factoring arrangements, but not derecognized is \$144 million (2014: \$187 million). Related liabilities of \$144 million (2014: \$187 million) are disclosed in Note 16. The amount of these receivables before the transfer transactions was \$151 million (2014: \$361 million). Additionally, in 2015 Syngenta transferred \$102 million of trade receivables to a securitization entity and received \$81 million cash from third party investors in that entity. Those investors have recourse for repayment of their investment only to the cash flows from the securitized Syngenta receivables. Syngenta is exposed to expected losses on these receivables through its subordinated first loss interest in the securitization issuance and has continued to recognize the full \$102 million carrying amount of the receivables at December 31, 2015. The net position of \$21 million represents Syngenta's maximum exposure to losses, subject to compliance with the terms of this arrangement. Syngenta has recognized the \$81 million cash received in current financial debt. The fair value of these receivables and liabilities at December 31, 2015 is not significantly different from their carrying amounts.

The fair value of trade receivables containing embedded exchange rate options that Syngenta has classified as at fair value through profit or loss at December 31, 2015 was \$105 million (2014: \$191 million). These amounts represent Syngenta's maximum exposure to credit risk relating to these types of trade receivables. Amounts charged to profit or loss in relation to these trade receivables for the years ended December 31, 2015 and 2014 were not material.

Other accounts receivable of \$845 million (2014: \$747 million) include income taxes recoverable of \$124 million (2014: \$89 million) and are net of immaterial provisions for doubtful accounts.

10. Other current assets

Other current assets at December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
Prepaid expenses	168	155
Non-current assets classified as held for sale	39	5
Assets held under barter agreements	81	60
Other	50	24
Total	338	244

Non-current assets classified as held for sale relate to assets at one manufacturing site.

11. Inventories

Inventories at December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
Raw materials and consumables	895	1,034
Biological assets	29	31
Work in progress	1,019	970
Finished products	2,402	2,826
Total	4,345	4,861

11. Inventories continued

Movements in inventory write-downs for the years ended December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
January 1	(422)	(457)
Additions charged to income	(285)	(289)
Reversals of inventory write-downs	74	50
Amounts utilized on disposal of related inventories	259	306
Currency translation effects and other	41	(32)
December 31	(333)	(422)

Reversals of inventory write-downs arise in the normal course of business when actual outcomes are more favorable than assumptions made in prior periods about Syngenta's future ability to sell inventories that are subject to risks of degradation and obsolescence, such as germination of seeds.

Movements in biological assets for the years ended December 31, 2015 and 2014 are as follows. These include amounts classified as other non-current assets.

(\$m)	2015	2014
January 1	32	36
Changes in fair value	135	151
Additions to cost	7	4
Sales and harvest	(140)	(156)
Currency translation effects and other	(3)	(3)
December 31	31	32
Of which: carried at fair value less costs to sell	29	28

Syngenta's inputs for measuring the fair value of those assets that are carried at fair value less costs to sell include both market data from actual sales and inputs based on the stage of growth of immature assets, which is not observable in the market. The fair values therefore represent a level 3 measurement in the fair value hierarchy as defined by IFRS 13. Their sensitivity to changes in the unobservable inputs is not material to the consolidated financial statements.

Quantities of biological assets in inventories at December 31, 2015 and 2014 are:

	2015	2014
(Millions of plants)		
Plants	65	72
Cuttings	530	482
(Thousands of hectares cultivated)		
Growing crops	1	-

12. Property, plant and equipment

Movements in property, plant and equipment for the year ended December 31, 2015 are as follows:

2015 (\$m)	Land	Buildings	Machinery and equipment	Assets under construction	Total
Cost					
January 1	181	2,012	4,961	552	7,706
Additions	2	47	200	229	478
Disposals	(2)	(8)	(130)	(4)	(144)
Classified as held-for-sale	(1)	(17)	(74)	(6)	(98)
Transfers between categories	6	75	222	(303)	–
Currency translation effects and other	(8)	(98)	(294)	(56)	(456)
December 31	178	2,011	4,885	412	7,486
Accumulated depreciation and impairment losses					
January 1	–	(1,072)	(3,072)	–	(4,144)
Depreciation charge	–	(66)	(283)	–	(349)
Impairment losses	–	(8)	(35)	–	(43)
Depreciation on disposals	–	6	113	–	119
Classified as held-for-sale	–	6	49	–	55
Currency translation effects and other	–	54	205	–	259
December 31	–	(1,080)	(3,023)	–	(4,103)
Net book value – December 31	178	931	1,862	412	3,383

Additions to property, plant and equipment of \$478 million (2014: \$713 million) comprise \$453 million (2014: \$600 million) of cash purchases and \$25 million (2014: \$113 million) of other additions, including business combinations, initial recognition of finance leases and capitalized borrowing costs.

The net book value of property, plant and equipment accounted for as finance lease assets at December 31, 2015 was \$72 million (2014: \$101 million) of which \$61 million is classified as Machinery and equipment (2014: \$87 million) and \$11 million is classified as Buildings (2014: \$14 million).

Movements in property, plant and equipment for the year ended December 31, 2014 were as follows:

2014 (\$m)	Land	Buildings	Machinery and equipment	Assets under construction	Total
Cost					
January 1	157	2,049	4,940	501	7,647
Additions	43	74	203	393	713
Disposals	(1)	(31)	(90)	(5)	(127)
Transfers between categories	8	68	215	(291)	–
Currency translation effects and other	(26)	(148)	(307)	(46)	(527)
December 31	181	2,012	4,961	552	7,706
Accumulated depreciation and impairment losses					
January 1	–	(1,124)	(3,017)	–	(4,141)
Depreciation charge	–	(67)	(298)	–	(365)
Impairment losses	–	–	(21)	–	(21)
Depreciation on disposals	–	31	82	–	113
Currency translation effects and other	–	88	182	–	270
December 31	–	(1,072)	(3,072)	–	(4,144)
Net book value – December 31	181	940	1,889	552	3,562

13. Intangible assets

Movements in intangible assets for the year ended December 31, 2015 are as follows:

2015 (\$m)	Goodwill	Product rights	Trademarks	Patents	Software	Other intangibles	Total
Cost							
January 1	1,934	2,958	85	52	399	358	5,786
Additions from business combinations	8	16	1	–	16	(16)	25
Other additions	–	13	–	–	41	38	92
Retirements and disposals	–	(2)	(1)	(4)	(10)	(10)	(27)
Currency translation effects	(33)	(18)	(1)	–	(5)	(6)	(63)
December 31	1,909	2,967	84	48	441	364	5,813
Accumulated amortization and impairment losses							
January 1	(274)	(1,858)	(38)	(27)	(289)	(114)	(2,600)
Amortization charge	–	(125)	(5)	(4)	(28)	(28)	(190)
Impairment losses	–	–	(9)	(3)	–	(10)	(22)
Retirements and disposals	–	–	1	5	10	8	24
Currency translation effects	4	4	–	1	3	3	15
December 31	(270)	(1,979)	(51)	(28)	(304)	(141)	(2,773)
Net book value – December 31	1,639	988	33	20	137	223	3,040

Other additions in 2015 and 2014 include intangible assets arising from license agreements involving non-monetary exchanges or where the cash flows related to the acquisition of the asset are payable over several years. Internally developed intangible assets of \$62 million (2014: \$37 million) are included within other additions. Cash paid to acquire and develop intangible assets was \$90 million (2014: \$82 million).

Amortization is included partly within cost of goods sold and partly within general and administrative expenses.

Other intangibles consist principally of values assigned to leases, supply contracts, production know-how and customer relationships acquired in business combinations.

Movements in intangible assets for the year ended December 31, 2014 were as follows:

2014 (\$m)	Goodwill	Product rights	Trademarks	Patents	Software	Other intangibles	Total
Cost							
January 1	1,949	3,361	90	68	414	379	6,261
Additions from business combinations	35	25	–	–	–	4	64
Other additions	–	30	–	–	34	45	109
Retirements and disposals	–	(338)	–	(8)	(9)	(51)	(406)
Currency translation effects	(50)	(120)	(5)	(8)	(40)	(19)	(242)
December 31	1,934	2,958	85	52	399	358	5,786
Accumulated amortization and impairment losses							
January 1	(280)	(2,084)	(36)	(36)	(300)	(144)	(2,880)
Amortization charge	–	(175)	(5)	(4)	(30)	(29)	(243)
Retirements and disposals	–	338	–	8	9	51	406
Currency translation effects	6	63	3	5	32	8	117
December 31	(274)	(1,858)	(38)	(27)	(289)	(114)	(2,600)
Net book value – December 31	1,660	1,100	47	25	110	244	3,186

13. Intangible assets continued

The net book value at December 31, 2015 and 2014 of goodwill is allocated to Syngenta's operating segments and other CGUs as summarized below:

(\$m)	2015	2014
Allocated to operating segments:		
Europe, Africa and Middle East (EAME)	235	235
North America	197	197
Latin America	173	173
Asia Pacific	338	355
Lawn and Garden	35	37
Total allocated to operating segments	978	997
Allocated to other individual CGUs:		
North America Corn and Soybean seed	315	315
Other, not individually significant	346	348
Total allocated to other individual CGUs	661	663
Total goodwill	1,639	1,660

Goodwill on recent acquisitions which had not yet been allocated to a CGU was not material at December 31, 2015 or 2014.

14. Financial and other non-current assets

Financial and other non-current assets at December 31, 2015 and 2014, are as follows:

(\$m)	2015	2014
Equity securities at fair value through OCI (Note 28)	73	71
Other non-current receivables	259	313
Defined benefit post-employment benefit asset (Note 22)	35	8
Long-term derivative financial assets (Note 28)	29	28
Total financial and other non-current assets	396	420
Investments in associates and joint ventures	177	188
Total	573	608

None of Syngenta's investments in associates and joint ventures are publicly quoted. At December 31, 2015, these investments consist mainly of \$101 million (2014: \$108 million) for a 50 percent ownership of CIMO Compagnie Industrielle de Monthey SA, Switzerland (CIMO), which provides utility services to Syngenta and other occupants of the Monthey manufacturing site, \$41 million (2014: \$40 million) for a 49 percent ownership of Sanbei Seeds Co. Ltd., China and \$27 million (2014: \$31 million) for a 40 percent ownership of Maisadour Semences SA, France (Maisadour). The latter two entities produce and sell seeds. Maisadour sells seeds to Syngenta.

Syngenta's share of CIMO's net income for 2013 was \$40 million, which included a contract termination penalty receipt and the deferred tax effect of a revised tax ruling. During 2015, Syngenta's share of CIMO's actuarial losses recognized in OCI is \$12 million (2014: actuarial losses of \$10 million; 2013 actuarial gains of \$10 million). Other effects on Syngenta's consolidated income statement for the periods presented, or any financial statement line items of the above associates and joint ventures themselves, are not material.

Transactions between Syngenta and its associates and joint ventures during the year ended December 31, 2015 are as follows:

- Goods and services provided by Syngenta to its associates and joint ventures \$14 million (2014: \$6 million; 2013: \$12 million)
- Goods and services provided by associates and joint ventures to Syngenta \$117 million (2014: \$120 million; 2013: \$134 million)
- Non-current assets and research and development provided by Syngenta to an associate of \$3 million (2014: \$nil; 2013: \$nil)

At December 31, 2015 Syngenta has accounts receivable and accrued income from associates and joint ventures of \$4 million (2014: \$nil) and accrued liabilities to associates and joint ventures of \$15 million (2014: \$10 million).

A bank overdraft guarantee of \$7 million (2014: \$7 million) has been provided to an associate.

On November 12, 2013 Syngenta agreed to advance EUR 9 million (\$10 million at December 31, 2015 currency translation rates) to its associated company Maisadour for 7 years to help finance the planned expansion of corn seed processing capacity in Maisadour Ukraine LLC, a subsidiary of Maisadour, which is a supplier of corn seeds to Syngenta. This current account advance will be made in instalments when called by Maisadour and bears a market rate of interest. At December 31, 2015 the balance outstanding was \$6 million (2014: \$7 million). By a deed between Syngenta, Maisadour and the European Bank for Reconstruction and Development (EBRD), repayment of the principal is subordinated to a loan between the EBRD and Maisadour Ukraine LLC which is guaranteed by Maisadour.

15. Trade accounts payable

The contractual maturities of trade accounts payable at December 31, 2015 and 2014 are as follows:

(\$m)	Total	0–90 days	90–180 days	180 days–1 year
2015	3,311	2,167	212	932
2014	3,472	2,430	124	918

16. Current financial debt and other financial liabilities

Current financial debt at December 31, 2015 and 2014 is as follows:

(\$m)	2015	2014
Bank and other short-term financial debt	308	325
Receivables factored with recourse	225	187
Current portion of long-term financial debt (Note 18)	14	625
Total current financial debt	547	1,137
Short-term derivative and other financial liabilities	183	192
Total	730	1,329

The following table presents additional information related to short-term borrowings at December 31, 2015:

2015 (\$m)	Amount outstanding at December 31	Weighted average interest rate on outstanding balance	Average amount outstanding for the year	Weighted average interest rate on average outstanding balance	Maximum month-end amount during the year
Bank and other short-term financial debt	308	4.3%	788	2.3%	1,827
Receivables factored with recourse	225	18.5%	170	18.5%	231
Current portion of financial debt (Note 18)	14	n/a	159	5.4%	568
Total	547	10.2%	1,117	5.2%	
2014	1,137	6.6%	1,643	5.2%	

The contractual maturities of current financial debt at December 31, 2015 and 2014 are as follows:

(\$m)	Total	0–90 days	90–180 days	180 days–1 year
2015	547	216	136	195
2014	1,137	271	704	162

The maturities of short-term derivative and other financial liabilities are presented in Note 27.

Information about fair values of financial liabilities is presented in Note 28.

17. Other current liabilities

Other current liabilities at December 31, 2015 and 2014 consist of the following:

(\$m)	2015	2014
Accrued short-term employee benefits	303	331
Taxes other than income taxes	132	120
Accrued interest payable	-	29
Accrued utility costs	56	70
Social security and pension contributions	74	97
Liabilities related to barter agreements	73	47
Other payables	111	135
Other accrued expenses	234	155
Total	983	984

The maturities of other current liabilities are as follows. For liabilities without a contractual maturity date, the analysis represents the estimated timing of cash outflows.

(\$m)	Total	0–90 days	90–180 days	180 days–1 year
2015	983	644	147	192
2014	984	744	76	164

18. Financial debt and other non-current liabilities

Financial debt and other non-current liabilities at December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
4.125% Eurobond 2015	-	608
Floating Eurobond 2017	272	303
0.750% CHF bond 2019	353	354
\$ private placement notes	260	262
1.875% Eurobond 2021	543	605
3.125% \$ Notes 2022	519	519
1.625% CHF bond 2024	251	252
1.250% Eurobond 2027	540	-
2.125% CHF bond 2029	151	151
4.375% \$ Notes 2042	248	248
Unsecured bond issues and US private placement notes	3,137	3,302
Liabilities to banks and other financial institutions	1	4
Finance lease obligations	59	71
Total financial debt (including current portion)	3,197	3,377
Less: current portion of financial debt (Note 16)	(14)	(625)
Non-current derivative financial liabilities	267	175
Other non-current liabilities and deferred income	51	49
Total	3,501	2,976

Information about fair values of financial liabilities is presented in Note 28.

Other non-current liabilities and deferred income relates to license and acquisition agreements with several counterparties. Related cash flows of \$14 million (2014: \$14 million) are payable between one and five years and \$37 million of deferred income at December 31, 2015 (2014: \$35 million) will be recognized in income as related licensed product sales occur.

The weighted average interest rate on non-current bank and other financial debt outstanding at December 31, 2015 is 3.2 percent per annum (2014: 2.9 percent).

18. Financial debt and other non-current liabilities continued

The weighted average interest rate on the combined current and non-current bank and other financial debt outstanding at December 31, 2015 is 4.4 percent per annum (2014: 3.7 percent). The weighted average interest rates include the cost of financing emerging market borrowings.

Interest paid on non-current financial debt was \$93 million (2014: \$109 million; 2013: \$110 million). All non-current debt ranks equally.

Syngenta AG has fully and unconditionally guaranteed on a senior unsecured basis the due and punctual payment of the principal of and any premium and interest on the debt securities issued by Syngenta Finance NV, which is an indirect, wholly-owned finance subsidiary. The guarantees will rank equally with all of Syngenta's other unsecured and unsubordinated debt. No other subsidiary of Syngenta guarantees such debt securities.

19. Provisions

Provisions at December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014
Restructuring provisions	84	36
Employee benefits:		
Pensions (Note 22)	383	374
Other post-retirement benefits (Note 22)	20	19
Other long-term employee benefits	63	66
Environmental provisions	209	237
Provisions for legal and product liability settlements	108	108
Other provisions	53	52
Total	920	892

(\$m)	2015	2014
Current portion of:		
Restructuring provisions	72	27
Employee benefits	45	100
Environmental provisions	28	37
Provisions for legal and product liability settlements	27	33
Other provisions	21	19
Total current provisions	193	216
Total non-current provisions	727	676
Total	920	892

The timing of payment in respect of non-current provisions is, with few exceptions, not contractually fixed and cannot be estimated with certainty. Key assumptions and sources of estimation uncertainty are discussed in Note 2.

At December 31, 2015, Syngenta recognized \$16 million (2014: \$14 million) in Financial and other non-current assets in respect of virtually certain reimbursements related to the above provisions.

Syngenta has recorded provisions for environmental liabilities at some currently or formerly owned, leased and third party sites throughout the world. These provisions are estimates of amounts payable or expected to become payable and take into consideration the number of other potentially responsible parties at each site and the identity and financial positions of such parties in light of the joint and several nature of certain of the liabilities. The material components of Syngenta's environmental provisions are based on a risk assessment involving investigation of the various sites.

Provisions for legal and product liability settlements, all of which are individually immaterial, relate to various legal proceedings incidental to the normal conduct of Syngenta's business, including proceedings involving product liability claims, commercial claims, employment and wrongful termination claims, patent infringement claims, competition law claims, tax assessment claims, regulatory compliance claims, waste disposal claims and tort claims relating to the release of chemicals into the environment. Other provisions mainly comprise provisions for long-term contractual obligations under license and other agreements.

19. Provisions continued

Movements in provisions for the year ended December 31, 2015 are as follows:

(\$m)	January 1	Charged to income	Release of provisions credited to income	Payments	Actuarial (gains)/losses	Transfers offset in defined benefit assets	Currency translation effects/other	December 31
Restructuring provisions:								
Employee termination costs	26	101	(2)	(66)	-	-	16	75
Other third party costs	10	52	-	(59)	-	-	6	9
Employee benefits:								
Pensions	374	148	-	(156)	36	5	(24)	383
Other post-retirement benefits	19	3	(1)	(8)	3	7	(3)	20
Other long-term employee benefits	66	6	(4)	(4)	-	-	(1)	63
Environmental provisions	237	3	(1)	(28)	-	-	(2)	209
Provisions for legal and product liability settlements	108	39	(8)	(25)	-	-	(6)	108
Other provisions	52	23	(4)	(15)	-	-	(3)	53
Total	892	375	(20)	(361)	39	12	(17)	920

Provisions for employee termination costs include severance, pension and other costs directly related to affected employees.

Provisions for other third party costs principally include payments for early termination of contracts with third parties related to redundant activities.

20. Share capital

Each Syngenta ordinary share carries one vote at the shareholders' meetings of Syngenta. Voting rights may be exercised only after a shareholder has been registered in Syngenta's share register. Registration as a shareholder with voting rights is subject to certain declarations on the ownership of Syngenta shares. The number of ordinary shares of par value CHF 0.10 that were authorized, issued, fully paid and outstanding at, and the movements during the years ended, December 31, 2015 and 2014 are presented in the table below.

The Board of Directors of Syngenta AG was authorized on April 24, 2012 to repurchase registered shares up to a maximum value of 10 percent of the company's share capital, for the purpose of capital reduction. On the basis of this authorization, Syngenta established a second trading line on the SIX Swiss Exchange ("SIX"), which was closed on October 15, 2015. At that date, 303,000 shares, out of an authorized maximum of 9,312,614 registered shares, had been repurchased. None of the repurchases were made during 2015.

On September 3, 2015, Syngenta announced its intention to return more than \$2 billion of capital to shareholders through a new share repurchase program and consequently, Syngenta announced on October 16, 2015 the opening of a new second trading line on the SIX. Up to December 31, 2015, 231,500 shares have been repurchased through this new second trading line.

(Millions of shares)	2015		2014	
	Shares in issue	Treasury shares held	Shares in issue	Treasury shares held
January 1	92.9	(1.3)	93.1	(1.4)
Cancellation of treasury shares	-	-	(0.2)	0.2
Share repurchases	-	(0.4)	-	(0.4)
Issue of ordinary shares under employee share purchase and option plans	-	0.5	-	0.3
December 31	92.9	(1.2)	92.9	(1.3)

At December 31, 2015 and 2014 Syngenta had no open options accounted for as equity instruments.

21. Non-cash items included in income before taxes

The following table analyzes non-cash items included in income before taxes for the years ended December 31, 2015, 2014 and 2013:

(\$m)	2015	2014	2013
Depreciation, amortization and impairment of:			
Property, plant and equipment	392	386	338
Intangible assets	212	243	278
Financial assets	1	4	11
Deferred revenue and gains	(19)	(34)	(34)
(Gains)/losses on disposal of non-current assets	(51)	(23)	3
Charges in respect of equity-settled share based compensation	74	63	67
Charges/(credits) in respect of provisions (Note 19)	355	(48)	103
Reduction in reimbursement receivable in respect of a provision	-	20	-
Financial expense, net	256	217	200
Gains on hedges reported in operating income	(10)	(13)	(8)
Income from associates and joint ventures	(7)	(7)	(48)
Total	1,203	808	910

22. Post-employment benefits

Syngenta has, apart from legally required social security arrangements, numerous independent pension plans, which are either “defined contribution” plans where company contributions and resulting benefit costs are a set percentage of employees’ pay or “defined benefit” plans where benefits are generally based on employees’ length of service and pensionable pay. Syngenta’s contributions to defined contribution plans were \$53 million for the year ended December 31, 2015 (2014: \$42 million; 2013: \$42 million). Approximately 30 percent of Syngenta’s employees are members of defined benefit plans and a significant proportion of these are members of both defined benefit and defined contribution plans. All of Syngenta’s major defined benefit plans are funded through legally separate trustee administered funds. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that present and future contributions should be sufficient to meet future liabilities. Syngenta’s main defined benefit pension plans are in the UK, Switzerland and the USA.

UK

In accordance with its rules, Syngenta’s UK Fund is governed by a company (the Trustee) that is controlled by a publicly listed independent professional trustee corporation. That corporation appoints the Trustee’s directors, including its own representative, Syngenta nominated and member nominated directors. The Trustee manages the UK Fund and appoints professional advisers independently to assist it in doing so. The UK Fund is subject to UK pensions legislation, is regulated by the UK Pensions Regulator and is exempt from most UK taxation through its registered status. The defined benefit section of the UK Fund has been closed to new members since 2002. New employees since 2002 instead join a defined contribution pension plan. The defined benefit section of the UK Fund is open to future accrual for employees who were members before that date; however, effective January 1, 2016, pensionable pay for these employees will be frozen, as described in Note 2. At retirement date, defined benefit members have the right to take up to 25 percent of the value of their benefits as a lump sum, with the balance being paid as an annuity. Alternatively, after taking appropriate advice, members may transfer their defined benefits to a different pension arrangement.

The Trustee is required by the UK Fund’s rules to increase pensions in payment and accrued deferred pension rights each year by the lower of 5 percent and price inflation, as measured by the UK Retail Price Index (RPI) or Consumer Price Index (CPI), as applicable. An independent actuary is required to value the UK Fund’s liabilities in accordance with UK pension regulations and certify the required contributions, both for future service and elimination of any deficit, at least every three years. Following each such valuation, employer contribution amounts must be formally agreed between Syngenta and the Trustee, subject to review by the Pensions Regulator, and remain binding until re-assessed in the following valuation. The solvency of the UK Fund, defined as its ability to pay benefits as they fall due, is guaranteed by the sponsoring subsidiary, Syngenta Ltd. Syngenta AG has irrevocably and unconditionally undertaken to ensure Syngenta Ltd. will honor that guarantee. In addition, certain benefits under the UK Fund are guaranteed by the UK Pension Protection Fund.

22. Post-employment benefits continued

The Trustee agrees the investment strategy for the UK Fund's assets and implements it through an investment sub-committee (the UK Investment Committee) it appoints from among the Trustee directors. The investment objectives are to ensure the assets are appropriately diversified and liquid to generate sufficient returns to meet the benefit liability and control the long term costs of the UK Fund. These objectives are achieved through appointing and monitoring a number of third party investment managers, each with specific investment mandates that collectively cover a wide range of investment classes and geographical markets and utilize both asset liability matching and return seeking strategies. Asset liability matching is achieved both through underlying investment class selection (e.g. fixed interest) and through using derivatives to limit the potential impact of changes in interest rates, price inflation and foreign currency exchange rates on the benefits payable by and assets of the UK Fund.

Switzerland

The Swiss federal law on occupational old age, survivors' and disability pensions ("BVG") sets minimum standards for occupational pension plans, which Syngenta's Swiss pension fund (the Swiss Fund) exceeds. All employees having had an employment contract for more than three months with any of Syngenta's Swiss subsidiaries or with its CIMO joint venture entity (see Note 14) and whose age and income exceed the minimum stipulated by BVG are automatically insured in the Swiss Fund. The benefits payable on retirement are calculated according to the capital sums that each member accumulates through transfer of benefits from previous employments, employer and employee contributions during service with Syngenta, interest and member voluntary contributions. Disability and survivors' death in service benefits are defined on the basis of the member's insured remuneration. Leavers before retirement are required to transfer their accumulated retirement and capital savings to the occupational pension plan of their new employment. The Swiss Fund is governed by a twelve member Board of Trustees. Six members, including the President, are nominated by Syngenta, and six are elected by insured plan members from among the employees. Its decisions regarding certain items, including rates of service and interest credits, conversion rates on retirement and plan asset investment strategy require a two-thirds majority vote. Legal conformity of the Swiss Fund's regulations is verified by the Swiss Pension Inspectorate. Syngenta's legal obligations, including required employer contributions, are defined in the pension fund rules which are agreed by the Board of Trustees.

Employer and employee contributions are payable according to an age related scale of percentages of pay. Under BVG, the Swiss Fund guarantees the vested benefit amount as confirmed annually to members. Interest may be added to member balances at the discretion of the Board of Trustees. Members have the right to take their retirement benefit as a lump sum, an annuity or part as a lump sum with the balance converted to a fixed annuity at the rates defined in the Fund's rules. The Board of Trustees may increase the annuity at their discretion subject to the Swiss Fund's funded status including sufficient free funds as determined according to Swiss statutory valuation rules. Syngenta accounts for the Swiss Fund as a defined benefit pension plan.

An actuarial balance sheet is usually drawn up annually, but at least every three years by the Swiss Fund's actuary. If the balance sheet reveals a deficit, the Board of Trustees defines appropriate measures to eliminate the deficit. If necessary, and after consultation with the actuary, the contributions payable by employees and by Syngenta may be increased or the benefits, including current pensions, may be adjusted to the funds available. The Board of Trustees manages the Swiss Fund's assets in conformity with the investment policy rules laid down by Swiss law, with the objectives of achieving investment that is secure, produces an appropriate yield and meets the liquidity needs of the Swiss Fund. This is implemented through an investment sub-committee similar to the UK Investment Committee mentioned above.

In May 2013, the Board of Trustees of Syngenta's Swiss pension plan adopted revised rules for the plan. The principal change aligned the required annuity conversion rates for retirement benefits more closely with then current actuarial rates, resulting in a reduction in Syngenta's defined benefit obligation. Syngenta accounted for the changes as a plan amendment. Based on an actuarial valuation at the date of the change, Syngenta recognized a past service gain of \$41 million. The valuation discount rate used to measure the defined benefit obligation at the date of the change was 2.0 percent, unchanged from December 31, 2012, and the only change in other valuation assumptions compared with December 31, 2012 was to reflect the impact of the revised rules on retirement age.

USA

Syngenta's main US defined benefit pension plan (the US Plan) is a non-contributory defined benefit pension plan subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA) and the US Internal Revenue Code of 1986, as amended (Code). In addition, certain benefits under the US Plan are guaranteed by the US Pension Benefit Guaranty Corporation. The US Plan was closed to new members effective January 1, 2009. Employees joining Syngenta after that date participate in a defined contribution pension plan. The defined benefits of existing members of the US Plan were not affected by this change. The US Plan offers members the choice of taking their retirement benefits, which are generally based on their age, pay and years of service, as a full lump sum at retirement date or as a fixed annuity. In these financial statements, the benefit obligation has been valued assuming that current eligible members will take the lump sum option at normal retirement or other permissible commencement dates. This assumption is consistent with historical and expected future member choices.

22. Post-employment benefits continued

US plan assets are held in a separate trust with State Street Bank and Trust Company as trustee and custodian. The assets must generally remain in the trust until all pension benefits are paid. An Investment Committee of Syngenta employees (the US Investment Committee), appointed by the Board of Directors of Syngenta Corporation, a wholly owned subsidiary of Syngenta AG, oversees the investment of the plan assets, either directly or through the appointment of investment managers. The US Investment Committee develops and implements an investment strategy that takes into account the liability profile of the US Plan. Asset classes are selected that include equities, fixed income and alternative assets. Interest rate derivatives may be used to hedge the interest rate risk of the US Plan. The Plan's key risks include interest rate risk that impacts the value of the liability and the fixed income assets of the US Plan, investment performance volatility, and to a lesser degree inflation and longevity risk. An actuarial valuation is required each year and is used to determine the valuation and characteristics of the liability of the US Plan.

Syngenta Corporation's funding policy is to contribute to the US Plan amounts necessary on an actuarial basis to at least satisfy the minimum funding requirements of the Code. Additional discretionary contributions above the minimum funding requirements can be made and are generally based on the annual service cost along with an adjustment for any over/under funding.

In 2015, the US Plan made a one-time lump sum payment offer to terminated vested participants who otherwise had no lump sum option, and made \$52 million in lump sum benefit payments to terminated vested participants as a result. Syngenta accounted for this as a settlement of these participants' DBO, which was \$57 million at the 4.25% discount rate at the settlement date.

Other plans

Within other plans, Syngenta recorded a one-time \$33 million gain in 2014 for the settlement of its defined benefit obligation in the Netherlands. The revised pension plan meets the criteria for classification as a defined contribution plan.

The status of Syngenta's defined benefit plans at December 31, 2015 and 2014 using actuarial assumptions determined in accordance with IAS 19 is summarized below. The following tables provide reconciliations of benefit obligations, plan assets and funded status of the defined benefit pension plans to the amounts recognized in the consolidated balance sheet at December 31, 2015 and 2014:

(\$m)	2015	2014
Benefit obligations		
January 1	6,198	6,104
Current service cost	147	134
Past service cost/(gain)	-	(145)
Curtailments and settlements	(42)	(288)
Employee contributions	39	42
Interest cost	164	212
Actuarial (gains)/losses:		
From changes in demographic assumptions	(20)	22
From changes in financial assumptions	54	710
From actual experience compared to assumptions	(130)	49
Benefit payments	(282)	(218)
Currency translation effects and other	(196)	(424)
December 31	5,932	6,198
Of which arising from:		
Funded plans	5,777	6,009
Wholly unfunded plans	155	189

22. Post-employment benefits continued

(\$m)	2015	2014
Plan assets at fair value		
At January 1	5,841	5,994
Actual return on plan assets	59	497
Employer contributions	168	185
Employee contributions	39	42
Curtailments and settlements	(52)	(256)
Benefit payments	(282)	(218)
Currency translation effects and other	(165)	(403)
December 31	5,608	5,841

Actual return on plan assets can be analyzed as follows:

(\$m)	2015	2014
Interest on plan assets	156	204
Actuarial gains/(losses)	(97)	293
Total	59	497

Funded status	(324)	(357)
Effect of asset ceiling ¹	(63)	(11)
Net accrued benefit liability	(387)	(368)
Amounts recognized in the balance sheet:		
Prepaid benefit costs (Note 14)	21	8
Accrued benefit liability	(408)	(376)
Net amount recognized	(387)	(368)

1 All material changes in the amount shown for the asset ceiling arose from the effect of applying the ceiling at each period end. Changes due to interest and foreign currency translation were immaterial

Of the accrued benefit liability for pensions of \$408 million at December 31, 2015, \$383 million is included in Note 19 as pension provisions and \$25 million as restructuring provisions (2014: \$374 million as pension; \$2 million as restructuring).

The following table shows the estimated undiscounted future defined benefit payments that are projected to occur within ten years from the balance sheet date. Actual payments may differ from those shown because of uncertain future events, including members' choice of benefit options as described above.

(\$m)	
2016	240
2017	245
2018	253
2019	269
2020	284
Years 2021-2025	1,519
Total 2016-2025	2,810

Syngenta's estimate of employer contributions to be paid to defined benefit plans in 2016 is \$160 million, excluding restructuring costs. Actual payments could differ materially from this estimate if any new funding regulations or laws are enacted or due to business and market conditions, which may result in Syngenta prepaying contributions. Additional contributions, the amount and timing of which are uncertain, may also be required as Syngenta's restructuring programs are implemented.

22. Post-employment benefits continued

In accordance with UK pension regulations, during the 2015 valuation Syngenta agreed with the UK pension plan Trustee to pay fixed contributions of \$44 million in 2016, \$41 million per year from 2017 to 2019 and \$38 million in 2020 to meet the valuation deficit at March 31, 2015, administration costs and part of the costs of employee service in those years. The balance of the costs of employee service is payable as a percentage of pensionable pay in those years. In 2015 and 2014, \$40 million of fixed contributions were paid. In 2013, \$15 million of prepaid contributions carried forward at December 31, 2012 were offset against the commitment for 2013 existing as a result of the prior valuation and \$25 million of fixed deficit recovery contributions were paid. Additional variable contributions of up to \$68 million in 2018 and \$46 million in 2020 are also required to be paid if the actual percentage return on plan assets is less than the agreed assumption. No additional variable contributions were required to be made in 2015, 2014 or 2013 as the actual percentage return on plan assets during these years exceeded the agreed assumption in the applicable valuation.

The fair values of assets and liabilities of the major defined benefit pension plans, together with aggregated data for other defined benefit plans are as follows. Unquoted investments represent investments in pooled funds in which the underlying investments are unquoted or those where the pooled fund does not have liquidity on at least a weekly basis:

At December 31, 2015	Fair value (\$m, except assumptions)				Total	%
	Switzerland	UK	USA	Other plans		
Investments quoted in active markets:						
Equities	559	331	154	22	1,066	19
Real estate funds	229	-	-	-	229	4
Bonds	774	628	267	25	1,694	30
Other assets	32	104	1	15	152	3
Unquoted investments:						
Equities	36	532	42	-	610	11
Real estate	28	138	-	-	166	3
Bonds	3	390	-	-	393	7
Other assets	372	478	201	-	1,051	19
Cash and cash equivalents	77	159	10	1	247	4
Fair value of assets	2,110	2,760	675	63	5,608	100
Benefit obligation	(2,343)	(2,717)	(655)	(217)	(5,932)	
of which: Active members	(1,402)	(554)	(371)			
Deferred members	n/a	(575)	(87)			
Pensioners and dependants	(941)	(1,588)	(197)			
Funded status	(233)	43	20	(154)	(324)	
Significant actuarial assumptions:						
Discount rate (%)	0.8	3.7	4.4	-	2.5	
Inflation (RPI) (%)	n/a	3.0	n/a			
Pensionable pay increase (%)	1.5	-	4.0			
Pension increase (%)	-	3.0	n/a			
Interest credit rate (%)	1.0	n/a	n/a			
Remaining life expectancy (years)						
male aged 63 in 2015	23.0	25.9	22.7			
female aged 63 in 2015	25.5	27.4	24.8			
male aged 63 in 2035	23.4	27.6	24.4			
female aged 63 in 2035	25.7	29.2	26.5			
Weighted average duration of benefit obligation (years)	23	17	9			

Other assets include investments in private equity funds, diversified hedge funds, infrastructure funds, insurance funds and inflation, interest rate and foreign currency derivatives.

22. Post-employment benefits continued

At December 31, 2014	Fair value (\$m, except assumptions)					%
	Switzerland	UK	USA	Other plans	Total	
Investments quoted in active markets:						
Equities	509	406	186	27	1,128	19
Real estate funds	170	–	–	–	170	3
Bonds	805	648	346	28	1,827	31
Other assets	38	157	1	7	203	3
Unquoted investments:						
Equities	26	604	39	1	670	11
Real estate	23	87	–	–	110	2
Bonds	64	376	–	–	440	8
Other assets	329	446	187	–	962	17
Cash and cash equivalents	130	180	19	2	331	6
Fair value of assets	2,094	2,904	778	65	5,841	100
Benefit obligation	(2,141)	(3,032)	(794)	(231)	(6,198)	
of which: Active members	(1,321)	(559)	(423)			
Deferred members, pensioners and dependants	(820)	(2,473)	(371)			
Funded status	(47)	(128)	(16)	(166)	(357)	
Significant actuarial assumptions:						
Discount rate (%)	1.3	3.6	4.0	–	2.8	
Inflation (RPI) (%)	n/a	3.1	n/a			
Pensionable pay increase (%)	1.5	3.6	4.0			
Pension increase (%)	–	3.1	n/a			
Interest credit rate (%)	1.5	n/a	n/a			
Remaining life expectancy (years)						
male aged 63 in 2014	23.0	26.0	22.8			
female aged 63 in 2014	25.4	27.5	25.1			
male aged 63 in 2034	23.4	27.8	23.7			
female aged 63 in 2034	25.7	29.4	25.9			
Weighted average duration of benefit obligation (years)	21	17	11			

The following table provides an analysis of the benefit costs recorded in the consolidated income statement for the defined benefit pension plans for the years ended December 31, 2015, 2014 and 2013:

(\$m)	2015	2014	2013
Current service cost	147	134	124
Past service cost/(gain)	–	(145)	(37)
Curtailements and settlements	10	(32)	–
Interest on the net defined benefit liability/(asset)	8	7	8
Net periodic benefit cost	165	(36)	95

Amounts recognized in OCI were as follows for the years ended December 31, 2015, 2014 and 2013:

(\$m)	2015	2014	2013
Actuarial (gains)/losses	1	488	(56)
Effect of asset ceiling	53	2	(41)

The sensitivity of the benefit obligation to the significant actuarial assumptions is discussed in the “Critical accounting estimates” section of Note 2.

22. Post-employment benefits continued

Other post-retirement benefits

Syngenta's net liability for other post-retirement benefits at December 31, 2015 was \$7 million (December 31, 2014: \$19 million) which comprised a defined benefit obligation of \$153 million (2014: \$167 million) and plan assets of \$146 million (2014: \$148 million). \$20 million is reported within Other post-retirement benefits provision in Note 19 (2014: \$19 million) and \$14 million within Defined benefit post-employment benefit asset in Note 14 (2014: \$nil). Actuarial gains recognized in OCI for the period were \$5 million (2014: actuarial losses of \$11 million; 2013: actuarial gains of \$39 million). Expense recognized in the consolidated income statement, contributions to the other post-retirement benefit plans and benefit payments by the plans were not material for 2015, 2014 or 2013.

The assumed healthcare cost trend rate at December 31, 2015 was 7.0 percent, decreasing in each successive year from 2015 onwards, to reach an ultimate rate of 5.0 percent in 2022 (December 31, 2014: 7.2 percent decreasing to 5.0 percent in 2021).

23. Employee share participation plans

Employee and management share participation plans exist as follows. All plans are equity-settled except where stated.

Syngenta Long-Term Incentive Plans (LTI)

The Syngenta Long-Term Incentive Plans provide selected executives and key employees of Syngenta with the opportunity to obtain the right to purchase shares of Syngenta AG, or the equivalent American Depositary Shares (ADS) that are offered to selected executives and key employees in the USA. The grant of options for Syngenta shares is at the discretion of the Compensation Committee of Syngenta's Board of Directors ("Compensation Committee"), whose members are appointed by the Board of Directors of Syngenta ("Board").

In 2015, Syngenta created a new LTI plan for members of the Syngenta Executive Committee ("Executive Committee"). Except as described below, the terms of the Syngenta LTI plan and the Syngenta LTI plan for members of the Executive Committee have the same terms. With effect from the 2015 award, awards of shares and share options to members of the Executive Committee are subject to additional performance conditions, as well as a required three year service period. The Compensation Committee sets the performance conditions before the grant date of the awards. The performance achieved during the three year performance period, which starts on January 1 in the year of grant and ends on the third December 31 following, determines the number of shares and options that vest, subject to the approval of the Compensation Committee. In the event that the financial results used to calculate the vesting of the shares and options need to be restated subsequently, Syngenta retains the right to claw back a portion of the awards.

Until the 2012 award, the exercise prices were equal to either the weighted average share price on the SIX for the five business days preceding the grant date, or the share price on the SIX at the grant date, with the Compensation Committee having determined which of the two exercise prices were used for each grant year. For subsequent awards, the closing share price on the SIX at the grant date was used to set the equity grant value and exercise price. Options over ADSs are converted to US dollars at the exchange rate at the grant date, which may vary from the exchange rate at the exercise date. Standard options vest in full and are exercisable after completion of three years of service and terminate after 10 years from the grant date. Vesting can occur after less than three years in particular circumstances including redundancy and retirement. None of the options vest on a pro rata basis during the vesting period.

For share option awards to Executive Committee members, the number of options vesting varies from 0% to 125% of the award, depending on the quartile in which Syngenta's Total Shareholder Return (TSR), defined as share price movement plus dividends, has ranked relative to the TSR of a comparator group of 16 public international quoted companies, including Syngenta and its major competitors. Performance is calculated in US dollars and share prices and dividends quoted in currencies other than US dollars are translated into US dollars using the average exchange rate in each year ending December 31.

23. Employee share participation plans continued

The following table sets out share option activity under these plans during 2015 and 2014, including the equivalent ADS, and summarizes information about share options outstanding at December 31, 2015 and 2014.

	Exercise price	Exercise price	Outstanding at	Granted	Exercised	Forfeited/ other	Outstanding at	Exercisable	Remaining contractual life
	(CHF)	(\$ equivalent ¹)	January 1		(thousands of options)		December 31		(years)
Year ended December 31, 2015									
Awarded in 2004	89.3	90.0	7.3	-	(7.3)	-	-	-	-
Awarded in 2005	127.4	128.4	12.7	-	(12.6)	(0.1)	-	-	-
Awarded in 2006	185.0	186.4	34.4	-	(20.0)	-	14.4	14.4	0.25
Awarded in 2007	226.7	228.4	45.9	-	(14.1)	-	31.8	31.8	1.25
Awarded in 2008	301.5	303.8	64.8	-	(23.4)	-	41.4	41.4	2.25
Awarded in 2009	233.4	235.2	110.4	-	(28.2)	(0.1)	82.1	82.1	3.25
Awarded in 2010	283.7	285.9	70.1	-	(21.2)	-	48.9	48.9	4.25
Awarded in 2011	308.7	311.1	144.6	-	(51.2)	-	93.4	93.4	5.25
Awarded in 2012	300.4	302.7	248.2	-	(87.5)	(1.5)	159.2	159.2	6.25
Awarded in 2013	391.4	394.4	244.8	-	(5.7)	(12.3)	226.8	34.5	7.25
Awarded in 2014	325.9	328.4	340.2	-	(5.2)	(13.1)	321.9	43.7	8.25
Awarded in 2015	332.2	334.7	-	486.9	-	(6.4)	480.5	4.3	9.25
Total for year ended December 31, 2015			1,323.4	486.9	(276.4)	(33.5)	1,500.4	553.7	

	Exercise price	Exercise price	Outstanding at	Granted	Exercised	Forfeited/ other	Outstanding at	Exercisable	Remaining contractual life
	(CHF)	(\$ equivalent ²)	January 1		(thousands of options)		December 31		(years)
Year ended December 31, 2014									
Awarded in 2003	59.7	60.4	6.9	-	(6.9)	-	-	-	-
Awarded in 2004	89.3	90.3	10.6	-	(9.6)	(1.0)	-	-	-
Awarded in 2004	89.3	90.3	19.3	-	(12.0)	-	7.3	7.3	0.25
Awarded in 2005	127.4	128.8	30.4	-	(17.7)	-	12.7	12.7	0.25
Awarded in 2006	185.0	187.0	43.2	-	(8.8)	-	34.4	34.4	1.25
Awarded in 2007	226.7	229.2	54.5	-	(8.6)	-	45.9	45.9	2.25
Awarded in 2008	301.5	304.8	75.4	-	(10.6)	-	64.8	64.8	3.25
Awarded in 2009	233.4	236.0	129.1	-	(18.5)	(0.2)	110.4	110.4	4.25
Awarded in 2010	283.7	286.8	80.1	-	(10.0)	-	70.1	70.1	5.25
Awarded in 2011	308.7	312.1	172.6	-	(27.2)	(0.8)	144.6	144.6	6.25
Awarded in 2012	300.4	303.7	264.0	-	(8.1)	(7.7)	248.2	10.0	7.25
Awarded in 2013	391.4	395.7	257.8	-	-	(13.0)	244.8	9.5	8.25
Awarded in 2014	325.9	329.5	-	347.8	-	(7.6)	340.2	7.3	9.25
Total for year ended December 31, 2014			1,143.9	347.8	(138.0)	(30.3)	1,323.4	517.0	

1 At the December 31, 2015 exchange rate

2 At the December 31, 2014 exchange rate

All fully vested options are exercisable.

The Long-Term Incentive Plan also grants selected executives and key employees of Syngenta restricted share units (RSUs) (or equivalent restricted ADSs for relevant Syngenta employees in the USA). RSUs (or equivalent restricted ADSs) are rights to receive the equivalent number of Syngenta AG shares for no payment at the end of a three-year vesting period. RSUs do not carry rights to dividends and the grant date fair value is reduced to reflect this. None of the RSUs or equivalent ADSs vest on a pro rata basis during the vesting period.

The Long-Term Incentive Plan for Syngenta Executive Committee members grants Syngenta performance share units (PSUs). PSUs are rights to receive the equivalent number of Syngenta AG shares for no payment at the end of a three-year vesting period, subject to performance. The number of PSUs vesting varies from 0% to 100% of the award, depending on achievement of defined targets for four specified long term metrics relating to financial and non-financial performance, each of which carries equal weighting for on target performance. Each year the Compensation Committee assesses performance against the targets for each metric, and the weighted sum of the assessment outcome represents one third of the eventual payout, subject to completion of the required service period.

23. Employee share participation plans continued

The following table sets out RSU and PSU activity under these plans during 2015 and 2014 (including the equivalent restricted ADS for relevant Syngenta employees in the USA), and summarizes information about RSUs and PSUs outstanding at December 31, 2015 and 2014.

RSUs and PSUs	Grant date	Grant date	Outstanding at	Granted	Distributed	Forfeited/ other	Outstanding at	Remaining
	fair value	fair value						
	(CHF)	(\$ equivalent ¹)		(thousands of shares)				(years)
Year ended December 31, 2015								
Awarded in 2012	277.0	305.6	76.0	-	(75.4)	(0.6)	-	-
Awarded in 2013	359.7	389.0	69.5	-	(8.5)	(3.1)	57.9	0.25
Awarded in 2014	298.5	332.6	95.6	-	(7.6)	(4.3)	83.7	1.25
Awarded in 2015	303.6	323.3	-	108.1	(0.9)	(2.1)	105.1	2.25
Total for year ended December 31, 2015			241.1	108.1	(92.4)	(10.1)	246.7	
Year ended December 31, 2014								
Awarded in 2011	287.4	302.9	74.4	-	(74.4)	-	-	-
Awarded in 2012	277.0	305.6	83.9	-	(5.2)	(2.7)	76.0	0.25
Awarded in 2013	359.7	389.0	74.8	-	(2.4)	(2.9)	69.5	1.25
Awarded in 2014	298.5	332.6	-	98.4	(0.9)	(1.9)	95.6	2.25
Total for year ended December 31, 2014			233.1	98.4	(82.9)	(7.5)	241.1	

¹ At the grant date exchange rate

Share option valuation assumptions

The fair value of options granted was measured using the Black-Scholes-Merton formula, except for the fair value of performance options awarded under the Executive Committee LTI plan, which was measured using the Monte Carlo method, adjusting the fair value for the relative TSR market condition. Except for the TSR adjustment, the measurement of fair value was not adjusted for any other feature of the option grant and no option grant was subject to a market condition. The effect of early exercise has been incorporated into the model by using an estimate of the option's expected life rather than its contractual life.

The weighted average assumptions used in determining the fair value of options granted were as follows:

	2015	2014
Dividend yield	2.9%	2.8%
Volatility	19.2%	20.1%
Risk-free interest rate – shares (CHF)	0.0%	1.0%
Risk-free interest rate – ADSs (\$)	2.1%	2.8%
Risk-free interest rate – TSR adjustment	(0.8)%	n/a
Expected life	7 years	7 years
Exercise price (CHF per share)	332.2	325.9
Exercise price (\$ equivalent per share ¹)	353.7	363.1

¹ At the grant date exchange rate

The dividend yield and volatility are management estimates for the life of the option, as no warrants or options over Syngenta AG shares for this period are widely traded. Both actual dividend yield and volatility may vary from the assumptions used above. The estimate of volatility takes into account the historical volatility of the Syngenta AG share price and the implied volatilities of such longer dated warrants that have been traded in the market. The volatility assumption for 2015, as measured at the grant date, was based on the 36-month historical volatility of Syngenta AG shares on the SIX. For the TSR adjustment, the correlation of the share prices of comparator companies has been measured using their historical daily returns over three years.

Syngenta Deferred Share Plan

The Syngenta Deferred Share Plan provides selected senior executives with an opportunity to obtain shares of Syngenta AG. The plan entitles participants to defer part of their annual short-term incentive awards in favor of Syngenta shares and to receive matching shares according to the rules of the plan. The grant date fair value of a deferred share and the corresponding matching share is the Syngenta share price on the grant date adjusted for the absence of dividend entitlement during the deferral period. Shares are deferred for a period of three years starting on the grant date. At the end of the deferral period, Syngenta matches the deferred shares on a one-for-one basis. A mandatory part of the short-term incentive is allocated as deferred shares. Additional voluntary deferrals within the limits of the plan can be made at the discretion of the participants. Vesting can occur before the end of three years in particular circumstances including retirement. None of the shares vest on a pro rata basis during the vesting period.

23. Employee share participation plans continued

The following table sets out activity under this plan during 2015 and 2014 including the equivalent ADSs that are offered to Syngenta employees in the USA:

	Outstanding at January 1	Granted	Distributed	Outstanding at December 31	Remaining life
	(thousands of shares)				(years)
Year ended December 31, 2015					
Awarded in 2012	45.9	–	(45.9)	–	–
Awarded in 2013	24.7	–	(6.2)	18.5	0.25
Awarded in 2014	1.2	–	(0.1)	1.1	1.25
Awarded in 2015	–	27.7	(3.1)	24.6	2.25
Total for year ended December 31, 2015	71.8	27.7	(55.3)	44.2	
Year ended December 31, 2014					
Awarded in 2011	25.0	–	(25.0)	–	–
Awarded in 2012	51.5	–	(5.6)	45.9	0.25
Awarded in 2013	26.7	–	(2.0)	24.7	1.25
Awarded in 2014	–	1.3	(0.1)	1.2	2.25
Total for year ended December 31, 2014	103.2	1.3	(32.7)	71.8	

At the end of the deferral period, employees would be entitled to the following additional shares:

	Grant date fair value (CHF)	Grant date fair value (\$ equivalent ¹)	Thousands of shares
Awarded in 2013	359.7	389.0	18.5
Awarded in 2014	298.5	332.6	1.1
Awarded in 2015	303.6	323.3	24.6
Total			44.2

¹ At the grant date exchange rate

None of these shares are vested as at December 31, 2015.

Employee share purchase plans

Syngenta has employee share purchase plans in various countries, which entitle employees to subscribe for shares in Syngenta AG with the benefit of either discounts from market value varying between 33 percent and 50 percent or a matching share. Shares issued under the plans vest immediately and are subject to blocking periods of between two and three years, with the exception of the UK plan, for which completion of three years' service is required before vesting. Maximum annual subscription amounts per employee vary between \$500 and \$3,000. In 2015, a total of 73,031 (2014: 73,840) shares were subscribed under these plans and settled through a release of treasury shares.

Compensation expense

The compensation expense associated with employee share participation plans, which is measured indirectly by reference to the fair value of the equity instruments granted, is as follows for the years ended December 31, 2015, 2014 and 2013:

	2015	2014	2013
(\$m)			
Long-Term Incentive Plan	45	42	39
Deferred Share Plan	6	7	26
Employee Share Purchase Plans	16	14	15
Total	67	63	80

23. Employee share participation plans continued

Other information regarding the plans is as follows:

	2015	2014	2013
Weighted average fair value of options granted during year (CHF per option)	36.8	46.4	57.0
Weighted average fair value of options granted during year (\$ equivalent per option ¹)	40.0	51.3	62.6
Weighted average share price at exercise date for options exercised during year (CHF per option)	370.9	329.4	390.2
Weighted average share price at exercise date for options exercised during year (\$ equivalent per option ²)	392.7	366.3	421.2
Fair value of shares granted during year:			
Deferred Share Plan (CHF per unit) – combined value of basic and matching share award	607.2	597.0	719.4
Deferred Share Plan (\$ equivalent per unit ¹) – combined value of basic and matching share award	646.5	665.2	778.1
Employee Share Purchase Plans (CHF per share)	165.3	166.6	180.2
Employee Share Purchase Plans (\$ equivalent per share ¹)	169.5	177.3	206.6
Employee Share Purchase Plan (\$ per ADS)	25.7	21.8	26.2
Cash received from exercise of options and subscription for shares (\$m)	85	53	83

¹ At the grant date exchange rate

² At the exercise date average exchange rate for the month

Syngenta has a policy of utilizing treasury shares to satisfy share option exercises and to meet share subscriptions and entitlements.

24. Transactions and agreements with related parties

Key management personnel are considered to be the members of the Syngenta Executive Committee and the Board of Directors. Their compensation is as follows for the years ended December 31, 2015, 2014 and 2013:

(\$m)	2015	2014	2013
Fees, salaries and other short-term benefits	13	12	13
Post-employment benefits	2	2	2
Payments to end of contractual notice period	3	-	-
Share based compensation	15	12	15
Total	33	26	30

Members of the Syngenta Executive Committee and Board of Directors receive their cash compensation in Swiss francs. The compensation amounts presented above have been converted into US dollars using the average currency exchange rate in effect during each year reported. The average Swiss franc per US dollar exchange rate for the year ended December 31, 2015 is 0.96 (2014: 0.91; 2013: 0.93).

Post-employment benefits includes healthcare, disability, death in service and pension costs.

The amount disclosed for share based compensation is the expense for the period calculated in accordance with IFRS 2, "Share Based Payment" and as described in Note 29, relating to key management personnel. The cost of a share based compensation award is spread over the vesting period of the award. Therefore the charge for each year comprises parts of that year's awards and those of preceding years that had not already vested at the start of the year.

Members of the Board, excluding the Chairman and the Chief Executive Officer, are eligible for the share plan for non-executive Directors. Eligible Directors define a percentage of their annual fee for compensation in shares and, in addition, choose between blocked shares or freely tradable shares. The Chairman receives a fixed part of his compensation in the form of blocked shares. Under these plans, members of the Board were allocated a total of 2,543 shares in lieu of cash compensation. These shares vest immediately and had a combined fair value at grant of \$1 million (2014: \$1 million; 2013: \$1 million).

Members of the Executive Committee are required to hold a minimum number of Syngenta AG shares. Depending on their date of appointment to the Executive Committee, members who do not currently have the minimum holding have until December 31, 2017 or December 31, 2018 to fulfil this requirement. Unvested share and option awards that are subject to performance conditions are excluded when determining the member's actual holding.

Detailed disclosures regarding executive remuneration required by Swiss Company Law are included in the Syngenta Corporate Governance Report on www.syngenta.com in the section "About Syngenta/Governance."

Transactions and balances between Syngenta and its employee post-retirement benefit plans are disclosed in Note 22.

25. Commitments and contingencies

Commitments

Minimum future lease payments at December 31, 2015 for finance leases are \$60 million (2014: \$74 million), of which \$18 million is due within one year (2014: \$21 million), \$34 million after more than one but less than five years (2014: \$41 million) and \$8 million thereafter (2014: \$12 million).

Fixed-term, non-cancelable operating lease commitments total \$120 million at December 31, 2015 (2014: \$91 million) of which \$61 million is due within one year (2014: \$28 million), \$52 million after more than one and less than five years (2014: \$55 million) and \$7 million thereafter (2014: \$8 million). Operating lease payments relate to leases of buildings, office equipment and vehicles. Operating lease expense in 2015 is \$44 million (2014: \$33 million; 2013: \$32 million).

Commitments for the purchase of property, plant and equipment at December 31, 2015 are \$134 million (2014: \$188 million).

At December 31, 2015 and 2014, Syngenta had entered into long-term commitments to purchase minimum quantities of certain raw materials, long-term research agreements with various institutions to fund various research projects, and other commitments. The estimated timing of minimum future committed payments is as follows:

(\$m)	2015		2014	
	Materials purchases	Other	Materials purchases	Other
Within one year	483	55	511	69
From one to two years	214	21	136	30
From two to three years	165	20	76	21
From three to four years	36	12	161	18
From four to five years	9	10	12	12
After more than five years	40	17	45	28
Total	947	135	941	178

Syngenta has no material contingent liabilities related to associates and joint ventures.

Syngenta's sales are made subject to normal warranties, which cover product technical specifications and, in some cases, products' performance effect on grower crop yields. Certain license agreements indemnify the other party against liabilities arising from claims related to the intellectual property licensed to or by Syngenta. Leases may require indemnification for liabilities Syngenta's actions may create for the lessor or lessee. Syngenta has also issued warranties to purchasers of businesses or product lines relating to events that arose before the sales. It is not possible to predict the maximum future payments possible under these or similar provisions because it is not possible to predict whether any of these contingencies will occur.

Syngenta has obtained licenses from others for the rights to sell certain products, or products containing certain technology, under agreements which require Syngenta to pay royalties based on its future sales of those products or that technology.

Contingencies

Litigation matters

Litigation is subject to many uncertainties, and the outcome of individual matters cannot be predicted with certainty. Consequently, it is reasonably possible that the final resolution of some of these matters could require Syngenta to make expenditures in excess of the established provisions that are reported in Note 19. Further, the range of amounts involved, as well as the period of time over which many of these expenditures may be made, cannot be reasonably estimated.

Syngenta maintains general liability insurance, including product liability insurance, covering claims on a worldwide basis with coverage limits and retention amounts which management believes to be adequate and appropriate in relation to Syngenta's businesses and the risks to which it is subject.

Significant recent or on-going legal proceedings are described below.

VIPTERA™

Since September 12, 2014, a total of 3,929 lawsuits (as of January 25, 2016) have been filed against Syngenta in state and federal courts in the United States by plaintiffs seeking damages from Syngenta for commercializing its AGRISURE VIPTERA® (MIR162) and DURACADE™ corn seed in the U.S. without having obtained import approval from China for those products. Virtually all of the lawsuits were filed by individual plaintiffs (including growers, grain elevators and exporters such as Cargill and Archer Daniels Midland), and approximately 70 by putative classes of growers and of exporters, ethanol plants, and others affected, on the theory that China's 2013 rejection of U.S. corn based on the alleged presence of MIR162 caused increased costs and U.S. commodity prices to drop. The cases are pending in multiple jurisdictions, including (1) a federal court multi-district litigation ("MDL") in the District of Kansas; (2) a consolidated state court proceeding in Hennepin County, Minnesota; (3) federal court in the Southern District of Illinois; and (4) various state courts in Illinois, Indiana, Louisiana and Ohio. Certain of these cases also name additional defendants including ADM, Bunge, Cargill, Louis Dreyfus and Gaviol. Certain of the cases currently pending in state court may be removed to federal court.

25. Commitments and contingencies continued

The allegations include claims that Syngenta issued misleading statements concerning the status of or timetable for approval of import of VIPTERA™ corn into China and that the public had a right to expect that corn sold to the general public was free from “contamination” with VIPTERA™ corn. The Cargill lawsuit refers to damages of in excess of \$90 million and one of the exporter lawsuits specifies damages of \$41 million. The federal court presiding over the MDL in Kansas issued a Scheduling Order on October 21, 2015, setting the first case for trial in June 2017. The court presiding over the consolidated state court proceeding in Minnesota issued a Scheduling Order on November 4, 2015, anticipating that the first trial will occur in March 2017. No other trial dates have been set. Syngenta strongly believes that the claims in these cases are without merit and will vigorously defend the lawsuits, and has filed counterclaims against ADM, Cargill and other grain companies.

On December 1, 2015, a claim was filed in Ontario, Canada by a proposed representative plaintiff on behalf of a putative class comprising all farmers in Canada against Syngenta Canada Inc. and Syngenta AG seeking damages from Syngenta for commercializing its AGRISURE VIPTERA® (MIR162) and DURACADE™ corn seed in the North American corn market without having obtained import approval from China for those products. Syngenta Canada Inc. has been served with the claim. Syngenta AG has not been served with the claim to date. The causes of action referred to in the lawsuit include negligence and negligent misrepresentations. The allegations include claims that Syngenta actively misled farmers about the importance of the Chinese market, the timing and substance of the application for approval in China, its ability to channel VIPTERA™ corn into non-Chinese markets and its ability to contain the infiltration of VIPTERA™ corn to the North American corn supply. The proposed representative plaintiff is seeking on behalf of the putative class general and special damages of 300 million Canadian dollars (\$216 million at the December 31, 2015 exchange rate), punitive and aggravated damages of 100 million Canadian dollars (\$72 million at the December 31, 2015 exchange rate), the costs of distributing all monies awarded to class members, pre-judgment interest, and costs on a substantial indemnity basis. No steps have been taken in the action except for the service of the claim on Syngenta Canada Inc. After Syngenta AG is served with the claim, and subject to any preliminary motions that Syngenta determines should be brought, the next step in these proceedings will be a certification motion brought by the proposed representative plaintiff. Syngenta strongly believes that the claims in this action are without merit and will vigorously defend the action.

Canada Beekeeper Lawsuits

In September 2014, a claim was filed in Ontario, Canada by two proposed representative members on behalf of a putative class comprising all beekeepers who have owned or continue to own and operate honey producing, pollinating, and/or queen bee rearing businesses in Canada since January 1, 2006, against a number of Syngenta legal entities together with certain entities of a second manufacturer of neonicotinoid insecticides. Plaintiffs allege negligence through the sale by that manufacturer and by Syngenta of products containing such insecticides in the knowledge that they would be injurious to bees and by virtue of misrepresentations and concealment relating thereto. Plaintiffs claim 400 million Canadian dollars (\$288 million at the December 31, 2015 exchange rate) general and 50 million Canadian dollars (\$36 million at the December 31, 2015 exchange rate) punitive damages. The pleadings in the Ontario proceedings have subsequently been amended by plaintiffs' counsel to add waiver of tort and unlawful conspiracy to the single cause of action, negligence, which was previously pleaded. Both of the additional causes of action are ancillary to and largely dependent on the negligence claim. The Syngenta defendant legal entities (Syngenta Canada Inc. and Syngenta International AG) have filed appearances in the proceedings. Subject to any preliminary motions, the next step in these proceedings will be a certification motion brought by the proposed representative plaintiffs. No dates have been scheduled for any motions at this time. In October 2014, a Motion for Authorization was filed by the same firm of plaintiffs' counsel in Montréal, Quebec seeking permission to bring a similar class proceeding in that province. The proposed representative plaintiff operates a family business specialized in the breeding of queen bees. The Quebec litigation closely resembles the original Ontario lawsuit claiming negligence except that, rather than a nationwide class, it alleges a class limited to Quebec. At this preliminary motion stage damages are unspecified. Notices of appearance have been entered on behalf of the Syngenta defendant legal entities in Quebec. A case management judge has been appointed in the Quebec proceedings. No date has been scheduled for the Motion for Authorization. A preliminary motion will be scheduled early in 2016 to address evidentiary issues related to any Motion for Authorization. Syngenta believes the claims in these cases are without merit and will vigorously defend the lawsuits.

Atrazine related litigation

In August 2013, a personal injury Complaint relating to atrazine was filed under seal in the Circuit Court for the Twentieth Judicial Circuit, St. Clair County, Illinois, on behalf of an unnamed minor (the case being brought under the alias James Doe) and his parents, against Syngenta Crop Protection LLC, Syngenta AG, a distributor, Growmark Inc., and three local dealers, M&M Service Company, Hamel Seed & Farm Supply, Inc. and St. Clair Service Company. The Complaint alleges public nuisance, strict liability and negligence, and seeks unspecified damages together with the costs of suit. Answers and Affirmative Defenses were filed on January 21, 2014 for Syngenta Crop Protection LLC as well as the non-Syngenta defendants, and on February 25, 2014 the Answer and Affirmative Defenses of Syngenta AG were also filed. Documentary fact discovery in the litigation opened in March 2014 and is continuing. The claims in the lawsuit have no grounding in fact or science and Syngenta will vigorously defend the lawsuit.

Tax matters

Significant management judgment is required to estimate the tax provisions related to the eventual outcome of reviews and audits by tax authorities of tax returns filed by Syngenta's subsidiaries. Tax returns filed by many of Syngenta's subsidiaries during the past several years are either currently under examination by tax authorities or are open for future examination until expiry under statutes of limitation. Syngenta is also subject to certain tax claims pending before the judiciary. In Syngenta's opinion, the likelihood is remote that a material amount in excess of current provisions will result from the resolution of any such examination or case. However, it is reasonably possible that actual outcomes and settlements may differ significantly from the estimated liabilities shown in the consolidated balance sheet for income taxes and in Note 17 for other taxes.

25. Commitments and contingencies continued

Environmental matters

It is reasonably possible that Syngenta may be required to make expenditures in excess of the established provisions that are reported in Note 19 to remediate environmental liabilities at some currently or formerly owned, leased and third party sites throughout the world. Further, in cases where it is not possible to estimate reliably the remediation costs that may be incurred in the future for environmental damage that has occurred at sites currently in operation and having no present obligation for environmental damage remediation, no provisions have been made. This is because it is neither possible to determine a time limit beyond which the sites will no longer be operated, nor what remediation costs may be required upon their eventual closure.

In the USA, Syngenta and/or its indemnitors or indemnitees, have been named under federal legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as a potentially responsible party ("PRP") in respect of several sites. Syngenta expects to be indemnified against a proportion of the liabilities associated with a number of these sites by the sellers of the businesses associated with such sites and, where appropriate, actively participates in or monitors the clean-up activities at the sites in respect of which it is a PRP.

Contingencies summary

Given the inherent difficulties in estimating liabilities relating to litigation, tax, environmental and certain other matters due to uncertainty concerning both the amount and timing of future expenditures, it is reasonably possible that additional costs may be incurred materially in excess of provisions recorded for such liabilities. Such expenditures, in excess of established provisions, could have a material effect on Syngenta's consolidated operating results and cash flows for a particular reporting period, but management does not believe they will have a materially adverse effect on Syngenta's consolidated financial position or liquidity, although there can be no assurances in this regard.

26. Principal currency translation rates

Year end rates used for the consolidated balance sheets at December 31, to translate the following currencies into \$, are:

	2015 per \$	2014 per \$
Swiss franc	0.99	0.99
British pound sterling	0.68	0.64
Euro	0.92	0.82
Brazilian real	3.90	2.66
Russian ruble	73.89	59.22
Ukrainian hryvnia	23.79	15.82

Average rates during the years ended December 31, used for the consolidated income and cash flow statements, to translate the following currencies into \$, are:

	2015 per \$	2014 per \$	2013 per \$
Swiss franc	0.96	0.91	0.93
British pound sterling	0.65	0.61	0.64
Euro	0.90	0.75	0.75
Brazilian real	3.33	2.35	2.16
Russian ruble	61.05	37.29	31.81
Ukrainian hryvnia	21.45	11.57	8.15

27. Risk management of financial risks

Risk management framework

The nature of Syngenta's business and its global presence exposes it to a range of financial risks. These risks include (i) market risks, which include potential unfavorable changes in foreign exchange rates, interest rates, commodity prices and other market prices (equities, credit spreads etc.), (ii) counterparty risk and (iii) liquidity and refinancing risk.

A financial risk management framework is in place in the form of a Treasury policy approved by the Board of Directors. This policy provides guidance over all Treasury and finance related matters, is underpinned by delegated authority guidelines and is additionally supported by detailed procedures in place across Syngenta. In accordance with its Treasury policy, Syngenta actively monitors and manages financial risk with the objectives of reducing fluctuations in reported earnings and cash flows from these risks and providing economic protection against cost increases. These objectives are achieved through (a) a monthly assessment of the impact of market risks against defined risk limits (see following section), which take into account the risk appetite of Syngenta and (b) the use of a variety of derivative and non-derivative financial instruments.

Financial instruments available for use to mitigate these risks are selected by Syngenta according to the nature of the underlying risk. These instruments are designed to economically hedge underlying risks arising from operational activities and from funding and investment positions. Syngenta does not enter into any speculative financial transactions.

The fair values and the volumes of the derivatives (including the time periods being hedged and the average strike/price achieved) used to manage financial market risks are below, classified by accounting treatment: CF and FV indicate derivatives where cash flow hedge and fair value hedge accounting is applied, respectively; and M2M indicates derivatives that are marked to market through profit or loss and hedge accounting is not specifically required. The transactions are managed to minimize the potential adverse movement for the entire portfolio of the net transactional flows, rather than on an individual currency basis. As such, there is no single average strike or price of the derivatives.

2015	Risk	Accounting treatment	\$m quantity	Fair value of outstanding derivatives ¹		Maturity profile in \$m			
				Assets	Liabilities	0-90 days	90-days -1 year	1-5 years	>5 years
	Foreign exchange risk (\$m)								
	Trading transaction – committed	M2M	7,133	81	(81)	(21)	18	3	-
	Trading transaction – uncommitted	CF	1,456	33	(21)	8	4	-	-
	Trading transaction – uncommitted	M2M	127	16	-	-	16	-	-
	Issued financial debt and interest	CF	2,234	-	(267)	-	-	(107)	(160)
	Interest rate risk	FV	500	25	-	-	-	-	25
	Commodity price risk								
	Gas ²	CF	6	-	(2)	(1)	(1)	-	-
	Soft commodities ³	M2M	87	2	(10)	(6)	(2)	-	-
	Soft commodities ⁴	CF	82	6	-	-	6	-	-
	Total		11,625	163	(381)	(20)	41	(104)	(135)

2014	Risk	Accounting treatment	\$m quantity	Fair value of outstanding derivatives ¹		Maturity profile in \$m			
				Assets	Liabilities	0-90 days	90-days -1 year	1-5 years	>5 years
	Foreign exchange risk (\$m)								
	Trading transaction – committed	M2M	5,670	136	(90)	30	13	3	-
	Trading transaction – uncommitted	CF	1,667	45	(60)	7	(22)	-	-
	Trading transaction – uncommitted	M2M	-	-	-	-	-	-	-
	Issued financial debt and interest	CF	2,316	-	(200)	-	(25)	(66)	(109)
	Interest rate risk	FV	500	26	-	-	-	-	26
	Commodity price risk								
	Gas ²	CF	13	-	(3)	(1)	(2)	-	-
	Soft commodities ³	M2M	189	36	-	22	14	-	-
	Soft commodities ⁴	CF	3	2	-	-	2	-	-
	Total		10,358	245	(353)	58	(20)	(63)	(83)

1 The fair values of derivatives are reported in the consolidated Balance Sheet as shown in Note 28

2 1,888,464 million (2014: 3,176,070 million) British thermal units

3 Mainly 1,637,089 lbs (2014: 1,331,575 lbs) of coffee

4 5,500,000 bushels (2014: 595,000 bushels) of soybean and 7,580,000 bushels of corn (2014: no hedge accounting designations for corn)

27. Risk management of financial risks continued

Of the derivatives listed in the table above, hedge accounting is applied wherever possible. Exceptions to this are derivatives where the fair value movements of the hedges and the retranslation of the underlying exposures are largely offset in profit or loss (hedging foreign exchange risk of committed monetary items); or derivatives placed, which do not fulfil the specific requirements of the accounting standard to achieve hedge accounting (hedging foreign exchange risk of uncommitted forecast transactions; commodity price risk: soft commodities, principally Brazil coffee purchases as part of barter programs).

For those transactions which are not designated for hedge accounting purposes where the transactions do not fulfil the specific requirements of the accounting standard to achieve hedge accounting, the gains and losses on those hedging instruments for the year 2015 were as follows:

Foreign currency forward contracts that are effective economic hedges of forecast cash flows arising from anticipated sales and purchases between Syngenta affiliates and third parties. The amount recorded in profit or loss in 2015 is \$nil (2014: loss of \$23 million; 2013: gain of \$1 million).

Commodity derivative contracts that are effective economic hedges of the anticipated purchases of raw materials or purchases, principally purchases related to corn in North America and corn and soybean in Latin America, and the resale of various crops in barter arrangements. The amount recorded in profit or loss in respect of these derivatives in 2015 is a loss of \$1 million (2014: loss of \$4 million; 2013: loss of \$13 million). The profit or loss impact from the corresponding forecasted transactions occurs when the related finished product inventories are sold, which is generally in the year following recognition of the gain or loss on the hedge.

Assessment of the impact of market risks

The impact of market risks is assessed using a variety of Value-at-Risk (VaR) and Earnings-at-Risk (EaR) methods. These methods are adjusted to reflect the nature of the exposures and the impact of the exposures on profit or loss of the financial year. The specific methods used to assess the impact of financial risks are described below:

Risk	Method	Exposure (financial statement item)	Time horizon (months)
Foreign exchange risk			
Trading transaction – committed	VaR	Monetary asset and liability carrying amounts	1
Trading transaction – uncommitted	EaR	Operating income	12
Issued financial debt and interest	VaR	Monetary liability carrying amounts	1
Translation	VaR	Cumulative translation adjustment in OCI	1
Interest rate risk	EaR	Interest expense	12
Commodity price risk	EaR	Operating income	12

VaR and EaR calculations are risk management tools designed to statistically estimate with a pre-set probability the maximum amount of potential losses in value (VaR) or earnings (EaR) over a specific (holding) time period given current and forecast positions and possible movements in market prices. The VaR and EaR methods used by Syngenta estimate the gross impact on the consolidated financial statements if the underlying items were not hedged and the net impact of the combined underlying hedged items and the related hedging instruments. VaR and EaR calculations attempt to recognize that holding different assets and liabilities or incurring different future cash flow exposures may reduce portfolio risk through diversification. Such diversification effects are captured within the calculations, which aim to present the risk based on Syngenta's currency exposure as a whole, rather than the sum of the exposures to the individual currency pairs within the portfolio of exposures. Using historical data, the VaR and EaR calculations are designed to predict possible changes in the markets in the future at a 99 percent confidence level, with a 1 percent probability that actual results will be worse than calculated. The time horizon used to calculate the VaR figures for each risk is determined by the time period over which management forecasts and monitors changes in the risk and in Syngenta's exposure to it and takes mitigating actions in response to those changes.

The assessment of the impact of market risks is performed monthly and the results are compared against annually defined risk limits. In cases where the net impact is higher than a risk limit, Syngenta enters into derivative financial instrument transactions in order to stay within the risk limits approved in the risk management policy. Breaches of risk limits, should they occur, are immediately reported to senior management.

Syngenta cannot predict future movements in risk variables precisely, therefore calculations of the impact of market risks neither represent actual losses nor consider the effects of potential favorable movements in underlying risk variables. Accordingly, these calculations may only be an indication of future movements to the extent the historic market patterns repeat in the future.

Foreign exchange risk

Operating worldwide exposes Syngenta to foreign exchange transaction and translation risk at both the Group and subsidiary level. Syngenta's policy is to hedge the effect of foreign exchange translation risk on shareholders' equity only in specific circumstances, for example to protect the value of temporary excess foreign currency denominated cash positions.

Foreign exchange transaction risk – committed

Syngenta's individual subsidiaries predominantly transact their operational activities in their respective functional currencies. However, the globally integrated nature of Syngenta's business results in its subsidiaries bearing some amount of transactional balance sheet risk, because some monetary items (including financial liabilities) are denominated in foreign currencies.

27. Risk management of financial risks continued

Such committed foreign currency exposures are largely generated by the routing of products from Syngenta's central manufacturing sites to its foreign locations. The risk management strategy is to ensure that these committed exposures are fully hedged, unless otherwise approved by Group Treasury, for example where not deemed cost-effective or where there is no forward market for a specific currency.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are foreign exchange forward contracts and cross currency swaps with the same risk (foreign exchange currency index), where the fair value movements of the hedges and the retranslation of the underlying committed exposures are largely offset in profit or loss.

The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the items within the hedged exposure effectively matches the timing of the cash flows of the derivative instrument.

Net committed transactional currency exposures are identified and reported on a monthly basis by business units. The impact of the hedging program can be illustrated in the VaR calculations for committed exposures, which relate to the revaluation of exposures relative to spot rates over a monthly period. The impact of interest differentials and other factors is not included in these calculations.

(\$m, except risk reduction %)	December 31, 2015 Value-at-Risk			December 31, 2014 Value-at-Risk		
	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Underlying currency (1-month holding period)						
Swiss franc	40	20	50%	47	15	69%
Brazilian real	96	–	100%	54	–	100%
British pound sterling	24	8	68%	36	6	84%
Russian ruble	23	–	99%	17	1	95%
Rest of world	83	24	71%	104	26	75%
Total undiversified	266	52	80%	258	48	81%
Diversification	(155)	(32)	79%	(178)	(33)	82%
Net VaR	111	20	82%	80	15	81%

At December 31, 2015, the Value-at-Risk for a one month holding period, after hedges, at a 99 percent confidence level was \$20 million (December 31, 2014: \$15 million).

The largest exposures arise in Swiss franc, Brazilian real, British pound sterling and Russian ruble. Switzerland and Great Britain house large research and manufacturing sites. In recent years, due to the growth of Syngenta sales, exposures in emerging markets (particularly Brazil) have become significant.

Foreign exchange transaction risk – uncommitted

Uncommitted transactions are expected, highly probable future transactions for which Syngenta does not yet have a contractual right or obligation (mainly sales and costs).

The US dollar represents the biggest single currency for both sales and costs. However, currency mismatches arise from Syngenta having a centralized cost base, denominated mainly in Swiss francs, British pounds and US dollars, against a local selling base, denominated mainly in US dollars, Euros and various other currencies, including those in emerging markets. In addition, due to the seasonality of Syngenta's business, the majority of sales occur during the first half of the year whereas costs tend to occur more linearly throughout the year.

The risk management objective is to minimize the impact of changes in foreign exchange rates on the operating income forecasted to result from these transactions. Syngenta considers hedging this exposure unless it can reliably expect that operating income could, without significant adverse economic impact, be protected by adjusting the pricing of forecast transactions for changes in foreign exchange rates before those transactions occur. Hedging transactions are managed to minimize the potential adverse movement for the entire portfolio of the net transactional flows, rather than on an individual currency basis. Transactions in a specific calendar year are managed cumulatively in separate portfolios.

The cumulative diversified risk of the whole portfolio can be reduced by entering into derivative transactions for a portion or the full amount of the individual transactions so that the remaining risk of the whole portfolio is at acceptable levels within clearly defined risk limits. The risk management objective is applicable for transactions in the following 24 months. Currently transactions for the next 12 month period are being hedged.

The derivative instruments that Syngenta's risk management policy allows to be used to manage the risk are:

- foreign exchange forward contracts and net purchased currency options with the same risk (foreign exchange currency index) which are eliminating or reducing the uncertainty in the cash flows.
- placed mainly with the same or (to a lesser extent) with shorter maturity than the timing of the cash flows being hedged so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

27. Risk management of financial risks continued

The impact of the hedging program on operating income can be illustrated in the Earnings-at-Risk calculation performed for anticipated net transactional currency flows for the following year taking into account related currency hedges.

(\$m, except risk reduction %)	December 31, 2015 Earnings-at-Risk			December 31, 2014 Earnings-at-Risk		
	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Underlying currency (12-month holding period)						
Swiss franc	199	90	55%	192	110	43%
Argentine peso	500	500	–	14	14	–
Brazilian real	94	94	–	79	75	5%
Russian ruble	10	8	20%	52	52	–
Euro	40	39	3%	46	47	(1)%
British pound sterling	40	25	38%	26	14	48%
Rest of world	191	159	17%	179	161	10%
Total undiversified	1,074	915	15%	588	473	20%
Diversification	(498)	(387)	22%	(373)	(315)	16%
Net EaR	576	528	8%	215	158	27%

At December 31, 2015, the total potential adverse movement for 2016 net transactional flows after hedges relative to year-end, at a 99 percent confidence level, was \$528 million (December 31, 2014: \$158 million).

The net resulting Earnings-at-Risk figures at December 31, 2015 increased compared with December 31, 2014 mainly due to the risk arising from the Argentine peso, which increased to \$500 million at December 31, 2015 from \$14 million at December 31, 2014 due to the significant devaluation that occurred in late December 2015 following the election of the new government in Argentina. The risk calculation method used by Syngenta puts more weight on events occurring closer to the date of the risk calculation. In order for the \$500 million net risk relating to the Argentine peso to be realized, the currency would have to appreciate to a rate of 2.6 to the US dollar from the 13.0 rate at December 31, 2015.

For the remaining risk figures excluding the Argentine peso, the risk is similar to 2014 levels with the greatest exposures being the Swiss franc, where Syngenta has a significant cost base in Switzerland with no material offsetting sales, and the Brazilian real, where a significant cost base is only partially offset by sales because sales in Brazil are largely dollarized.

Foreign exchange transaction risk – issued financial debt and interest

Syngenta has a funding strategy which involves securing a diversification of funding sources in different markets and maintaining an optimal currency mix of debt.

This additional foreign currency exposure arises from the debt issuances in Euro and in Swiss franc under the Euro Medium Term Note (EMTN) program. The risk management objective is to minimize the impact of changes in foreign exchange rates on these foreign currency denominated debt interest and principal repayments.

The foreign exchange risk on the foreign currency denominated debt is managed mostly by derivative instruments, and to a lesser extent within a portfolio of other committed transactions, so that no material foreign currency risk remains as a result of the foreign currency denominated debt.

The derivative instruments which Syngenta's risk management policy allows to be used to manage the risk are:

- cross currency swaps designated as hedges of foreign exchange risk of future interest and principal payments on foreign currency financial debt which are eliminating or reducing the uncertainty in the cash flows.
- placed mainly with the same terms as the items being hedged so that the timing of the interest and principal repayments of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

Foreign exchange translation risk

Translation exposure arises from the consolidation of foreign currency denominated financial statements of Syngenta's subsidiaries. This is reported as currency translation effects in OCI.

Translation risk can be significant; however, Syngenta regards its equity base to be of sufficient magnitude generally to absorb the short- to medium-term impact of exchange rate movements.

Syngenta can use both foreign currency denominated debt and net investment hedging to manage this exposure. The latter incorporates specific actions to protect the value of temporary excess foreign currency denominated cash positions. No hedging was undertaken for exposures of this type during the years ended December 31, 2015, or 2014. The exposure is deemed to be mitigated by the large net asset base of Syngenta and consequently no additional management of the exposure was undertaken in 2015 or 2014.

27. Risk management of financial risks continued

The table below presents the 1-month translation Value-at-Risk:

(\$m)	December 31, 2015 Value-at-Risk	December 31, 2014 Value-at-Risk
Currency of net investment in subsidiary (1-month holding period)	Gross impact	Gross impact
Brazilian real	164	139
Swiss franc	287	102
Euro	56	31
British pound sterling	61	44
Rest of world	128	123
Total undiversified	696	439
Diversification	(277)	(222)
Net VaR	419	217

At December 31, 2015, the Value-at-Risk for a one month holding period at a 99 percent confidence level was \$419 million (December 31, 2014: \$217 million). The Value-at-Risk at December 31, 2015 is higher than as of December 31, 2014 due to overall increase in foreign exchange volatility.

The two largest single currency exposures arise in the Swiss franc and Brazilian real, driven by the large operations and investments in facilities in Switzerland and Brazil.

Interest rate risk

Syngenta is exposed to fluctuations in interest rates on its borrowings (including forecasted borrowings) and excess cash. While the majority of Syngenta's borrowings have fixed interest rates, portions of Syngenta's net borrowings, including its short-term commercial paper program and local borrowings, are subject to changes in short-term interest rates.

Syngenta monitors its interest rate exposures and analyzes the potential impact of interest rate movements on net interest expense. The risk management strategy involves ensuring an efficient fixed/floating mix of total debt within approved interest rate limits.

The derivative instruments allowed to manage the risk are interest rate swaps relating to future interest payments of financial debt liabilities. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

At December 31, 2015, the net amount of Earnings-at-Risk on floating rate debt due to potential changes in interest rates (a parallel shift of 100 bps was applied) was \$10 million (2014: \$6 million). The net amount of Earnings-at-Risk on net debt, as defined under "Capital structure" below, due to potential changes in interest rates was immaterial at December 31, 2015 and 2014.

Commodity price risks

Operating in the agribusiness sector, changes in certain commodity prices affect Syngenta's reported operating results and cash flows. On a limited basis, Syngenta enters into derivative transactions to hedge the exposure of its cost base to commodity prices. This activity comprises oil and natural gas hedging in the UK and USA, as well as soft commodity hedging for corn and soybean purchases by the Seeds business in the USA, Canada, Brazil and Argentina, where Syngenta contracts to purchase various seed crops from growers and hedges the cost of the purchases. In barter arrangements where Syngenta sells products in exchange for receiving a certain amount of a commodity crop, Syngenta hedges the value of the crop. At December 31, 2015, there were no open hedging transactions for Brazil and Argentina corn and soybean price risk.

Syngenta has indirect exposure to oil price fluctuations mainly through the impact of oil prices on the cost of both raw materials, especially chemical intermediates in the Crop Protection business, and distribution activities. At December 31, 2015, there was no hedge protection in place for oil for 2016 (December 31, 2014: no hedge protection in place for oil for 2015). As the exposure to oil is indirect, Syngenta does not calculate the Earnings-at-Risk due to potential changes in oil prices.

Natural gas exposure occurs in Syngenta's primary manufacturing sites and Syngenta is managing the exposure by hedging the main risk component, which is the natural gas market price, contractually linked to the NYMEX natural gas benchmark price. The other risk components within the exposure are immaterial.

The main objective of managing commodity price risk is to reduce the impact of commodity price changes on operating income and to provide economic protection against future cost increases. Syngenta uses fixed price contracts and derivatives (both Over-the-Counter (OTC) and exchange traded instruments, including commodity option and futures contracts) to achieve this objective. The derivative instruments are placed with the same maturity as the expected cash flows of the hedged transactions so that the timing of the cash flows of the hedged transactions effectively matches the timing of the cash flows of the derivative instrument.

27. Risk management of financial risks continued

At December 31, 2015, the net amount of Earnings-at-Risk due to potential changes in natural gas prices was not material. Earnings-at-Risk due to potential changes in prices of soft commodities, principally corn and soybean, assuming a 12-month holding period are presented below.

(\$m, except risk reduction %)	December 31, 2015 Earnings-at-Risk			December 31, 2014 Earnings-at-Risk		
	Gross impact	Net impact	Risk reduction	Gross impact	Net impact	Risk reduction
Soft commodities						
Total undiversified ¹	40	16	60%	30	27	12%

¹ As the main soft commodities are largely correlated to each other, the impact of diversification is immaterial

The Earnings-at-Risk of soft commodities is driven by their high price volatility compared to other asset classes. The hedging program reduces overall 12-month Earnings-at-Risk at December 31, 2015 to \$16 million (December 31, 2014: \$27 million). The decrease in net risk in 2015 is mainly due to higher hedge ratios.

Derivatives and hedge accounting

In accordance with the transitional requirements of IFRS 9 (2013) as applied by Syngenta from January 1, 2014, information for 2015 and 2014 below is in accordance with IFRS 9 (2013) and comparative information for 2013 is in accordance with IAS 39, as previously applied by Syngenta.

Syngenta seeks to apply, wherever possible, hedge accounting to present its financial statements in accordance with the economic purpose of the hedging activity. Hedges for which hedge accounting is not adopted either (a) do not meet the requirements for hedge accounting treatment under IFRS or (b) when combined with the accounting for the underlying hedged items, impact the financial statements in a manner aligned with the economic purpose of the hedging transaction without the need to adopt hedge accounting treatment, for example hedges of monetary items denominated in foreign currency.

Syngenta determines the economic relationship between the hedged items and the hedging instruments by reviewing the critical terms of the hedged items and the hedging instruments. As a result Syngenta concludes that the risk being hedged for the hedged items and risk inherent in the hedging instruments are sufficiently aligned, there is no inherent mismatch in the hedging relationship and a 100% hedge ratio applies both for the actual quantities hedged and for the hedge accounting, except as described below.

For the hedging of foreign currency risk of uncommitted forecasted trading transactions, because the exposures are largely generated by the routing of products from Syngenta's central manufacturing sites to its foreign locations, the profit or loss impact from the corresponding transactions occurs when the related finished product inventories are sold to third parties. When entering into derivative hedging contracts, Syngenta selects maturity dates based on the forecast period that Syngenta holds inventories of its products for each commercial market by hedged currency exposure. Limited variability in the holding period occurs mainly due to timing of the third party sales transactions ("inventory holding period mismatch").

For the hedging of commodity price risk of soy and corn, there is variability between the index being hedged (CBOT) and the drivers of the actual exposures (local soy elevator prices based on CBOT and Syngenta seeds production and selling prices based on CBOT). The variability is, however, limited to individual transactions within the group of transactions in this hedging program – and a hedge ratio of 100% is observed for the whole group of transactions.

The following table summarizes the accounting treatment, sources of ineffectiveness and the effectiveness assessment method for the identified financial market risks:

Risk	Accounting treatment	Potential sources of ineffectiveness	Effectiveness assessment	
			Method	Frequency
Foreign exchange risk:				
Trading transaction – uncommitted	CF	Lower volume of hedged items; Inventory holding period mismatch	Critical terms match	Quarterly
Issued financial debt and interest	CF	Lower volume of hedged items	Critical terms match	Quarterly
Interest rate risk	FV	Lower volume of hedged items	Critical terms match	Quarterly
Commodity price risk:				
Gas	CF	Lower volume of hedged items	Critical terms match	Semi-annually
Soft commodities	CF	Lower volume of hedged items; index mismatch	Regression analysis	Quarterly

Ineffectiveness is recognized in the consolidated income statement in Other general and administrative for hedges of uncommitted foreign currency forecast transactions, in Financial expense, net for hedges of committed foreign currency monetary items, in Financial expense, net for hedges of interest rate risk and in Cost of goods sold for hedges of commodity price risk. For the years ended December 31, 2015 and 2014 none of the above potential sources of ineffectiveness, individually or collectively, resulted in material amounts of actual ineffectiveness being reported for any hedge accounting relationships.

27. Risk management of financial risks continued

Fair Value Hedge Accounting

The amounts being reported in the statement of financial position for the fair value hedging relationships at December 31, 2015 and 2014 are as follows:

Risk (\$m)	Carrying amount of hedged item		Accumulated amount of fair value adjustment	
	2015	2014	2015	2014
		Liabilities		Liabilities
Interest rate risk – for continuing hedging relationships	519	519	(21)	(22)
Interest rate risk – for hedged items that have ceased to be adjusted	85	683	(10)	(12)
Total	604	1,202	(31)	(33)

The carrying amounts of the hedged items, including the fair value adjustments to the hedged items, are reported under Current financial debt and other financial liabilities and Financial debt and other non-current liabilities.

The change in the value of the hedged items during the period for hedge effectiveness purposes was \$4 million (2014: \$3 million).

Cash flow hedges

The gains/(losses) on derivative instruments recognized into and classified out of the cash flow hedge reserve during the years ended December 31, 2015 and 2014 were as follows:

2015 (\$m)	Continuing hedging relationships					Hedge accounting no longer applied				Total
	Foreign exchange risk		Commodity price risk			Subtotal	Foreign exchange risk – translation	Issued financial debt and interest	Subtotal	
	Trading transaction – uncommitted	Issued financial debt and interest	Gas	Soft commodities						
Opening balance	31	(60)	(3)	14	(18)	(69)	(2)	(71)	(89)	
Income taxes	(7)	(1)	–	(2)	(10)	–	–	–	(10)	
(Losses)/gains recognized in OCI:										
on hedges as designated	(12)	1	(2)	(21)	(34)	–	(5)	(5)	(39)	
undesignated hedging costs recognized in OCI	(9)	–	–	–	(9)	–	–	–	(9)	
Transferred directly to assets or liabilities	–	–	–	(4)	(4)	–	–	–	(4)	
Reclassifications to profit or loss:										
(Losses)/gains on hedges as designated:										
Cost of goods sold	–	–	5	4	9	–	–	–	9	
General and administrative	(21)	–	–	–	(21)	–	–	–	(21)	
Financial expense, net	–	97	–	–	97	–	5	5	102	
Closing balance	(18)	37	–	(9)	10	(69)	(2)	(71)	(61)	

2014 (\$m)	Continuing hedging relationships					Hedge accounting no longer applied				Total
	Foreign exchange risk		Commodity price risk			Subtotal	Foreign exchange risk – translation	Issued financial debt and interest	Subtotal	
	Trading transaction – uncommitted	Issued financial debt and interest	Gas	Soft commodities						
Opening balance	63	(69)	1	15	10	(73)	6	(67)	(57)	
Income taxes	27	(25)	–	3	5	–	–	–	5	
(Losses)/gains recognized in OCI	(21)	(243)	(3)	(6)	(273)	4	(16)	(12)	(285)	
Reclassifications to profit or loss:										
Cost of goods sold	–	–	(1)	2	1	–	–	–	1	
General and administrative	(38)	–	–	–	(38)	–	–	–	(38)	
Financial expense, net	–	277	–	–	277	–	8	8	285	
Closing balance	31	(60)	(3)	14	(18)	(69)	(2)	(71)	(89)	

27. Risk management of financial risks continued

Comparative amounts for 2013

Gains/(losses) on fair value hedges recognized in profit or loss for the year ended December 31, 2013 were as follows:

(\$m)	2013
Total gains/(losses) from hedging instruments	5

Underlying hedged items	(5)
-------------------------	-----

Gains/(losses) on derivative instruments recognized as cash flow hedges and hedges of net investments in foreign operations during the year ended December 31, 2013 were as follows:

(\$m)	2013		
	Foreign exchange and interest rate	Commodity risk	Net investment hedges
Opening balance of (losses)/gains recognized in OCI	(5)	18	(72)
Income taxes	(13)	2	–
(Losses)/gains recognized in OCI	(8)	1	(1)
(Gains)/losses removed from OCI and recognized in profit or loss:			
Cost of goods sold	–	(4)	–
General and administrative	5	–	–
Financial expense, net	21	–	–
Closing balance of gains/(losses) recognized in OCI	–	17	(73)

Amounts reclassified from the cash flow hedge reserve into profit or loss are recognized in the consolidated income statement in Other general and administrative for hedges of uncommitted foreign currency forecast transactions, in Financial expense, net for hedges of committed foreign currency monetary items and for hedges of interest rate risk and in Cost of goods sold for hedges of commodity price risk.

Credit risk

Credit risk arises from the possibility that counterparties involved in transactions with Syngenta may default on their obligation, resulting in financial losses to Syngenta. Credit risk relates both to financial assets (including derivatives, marketable securities and money market contracts) as well as to operational assets managed by Syngenta's businesses (such as trade receivables).

Syngenta's maximum exposure to credit risk is the carrying values of its financial assets and receivables, including derivatives with positive market values. These amounts are disclosed in Note 28.

Syngenta has policies and operating guidelines in place to ensure that financial instrument transactions are only entered into with high credit quality banks and financial institutions. These include limits in respect of counterparties to ensure that there are no significant concentrations of credit risk. Syngenta continuously monitors the creditworthiness of its counterparties based on credit ratings and credit default swap data.

At December 31, 2015, Syngenta had no treasury or derivative transactions representing a significant concentration of credit risk. No credit losses have been incurred from investments in derivative financial instruments during the years ended December 31, 2015 and 2014.

To minimize its exposure to derivative positions, Syngenta enters into netting agreements under an International Swaps and Derivatives Association (ISDA) master agreement with its respective counterparties. In addition, for almost all derivative positions, Syngenta has entered into Credit Support Annex contracts (CSAs) under which cash is exchanged as collateral. The CSA contracts cumulatively limit either Syngenta's or the counterparty's aggregate credit risk exposure to no more than \$1 million per counterparty on a weekly settlement basis for the positions for which CSA contracts have been agreed. There are no constraints on the cash exchanged and held between counterparties and the collateral can be used as part of operations. At December 31, 2015, an asset amounting to \$267 million (2014: \$160 million), and a liability amounting to \$43 million (2014: \$14 million) were recorded representing cash paid and received by Syngenta as collateral under these CSAs.

The impact of credit risk on the fair value of derivatives is considered through market observable credit default swap spreads for Syngenta and its counterparties. The impact on the fair value of Syngenta's derivative positions at December 31, 2015 and 2014 of the risk of default by financial counterparties was not material.

The credit risk to operational assets is managed through the use of credit limits and is partially mitigated through commercial activities, which include barter operations, cash sales incentives and obtaining other security from customers where appropriate.

27. Risk management of financial risks continued

The following tables show the effect of set off rights that apply to financial assets and liabilities under the above ISDA and CSA agreements at December 31, 2015 and 2014. Syngenta's rights under these arrangements would become enforceable in the event of a future default of the respective counterparty.

(\$m)	2015		2014	
	Assets	Liabilities	Assets	Liabilities
Gross recognized derivative financial instrument fair values (Note 28)	163	(381)	245	(353)
Amounts offset in consolidated balance sheet	–	–	–	–
Net amounts per consolidated balance sheet	163	(381)	245	(353)
Amounts subject to conditional set-off rights but not offset in consolidated balance sheet:				
ISDA Master netting agreements for derivative financial instruments	(65)	65	(135)	135
Collateral (received) / paid by Syngenta under CSA agreements	(43)	267	(14)	160
Net amounts in the event that all conditional set-off rights are applied	55	(49)	96	(58)

Liquidity risk and refinancing risk

Within Syngenta's risk management framework, liquidity risk is defined as the risk of being unable to raise funds to meet payment obligations when they fall due.

Refinancing or funding risk is defined as the risk of being unable, on an ongoing basis, to borrow in the market to fund actual or proposed commitments. Syngenta mitigates its liquidity and refinancing risk by maintaining: a committed unsecured funding facility; ongoing discussions with its core banks to best monitor its funding capacity; simulations; and diversification of its debt portfolio.

Syngenta's liquidity risk policy is to maintain at all times sufficient liquidity reserves both at Group and subsidiary level in order to meet payment obligations as they become due and also to maintain an adequate liquidity margin. The planning and supervision of liquidity is the responsibility of the subsidiaries and Group Treasury. Liquidity requirements are forecasted on a weekly basis. Syngenta operates regional or country cash pools to allow efficient use of its liquidity reserves.

Short-term liquidity

Two of Syngenta's largest markets are Europe, Africa and the Middle East and North America. Both sales and operating profit in these two regions are seasonal and are weighted towards the first half of the calendar year, reflecting the northern hemisphere planting and growing cycle. Latin America is another large market for Syngenta and sales and operating profit there are weighted towards the second half of the calendar year, reflecting the southern hemisphere planting and growing cycle. This seasonal operating activity results in seasonal working capital requirements.

Syngenta's principal source of liquidity consists of cash generated from operations. Working capital fluctuations due to the seasonality of the business are supported by short-term funding available from a \$2.5 billion Global Commercial Paper program supported by a committed, revolving, multi-currency syndicated credit facility, the amount of which was \$1.5 billion at December 31, 2015. In 2014, the credit facility was extended by one year and will now mature in 2019. There were no amounts drawn under the Global Commercial Paper program at December 31, 2015 (2014: \$nil). The average outstanding balance under the Global Commercial Paper program for the year 2015 was \$500 million (2014: \$360 million).

The maturity analyses for Syngenta's current financial liabilities other than short-term derivative liabilities are presented in Notes 15 to 17.

The maturities of short term derivatives are as follows:

(\$m)	Total	0–90 days	90–180 days	180 days–1 year
2015	115	90	16	9
2014	178	78	73	27

Long-term financing

Long-term capital employed is currently financed through eight unsecured bonds, one unsecured floating rate note, and unsecured notes issued under the Note Purchase Agreement in the US Private Placement market. During 2015, the 4.125 percent Eurobond 2015 with the principal of EUR 500 million matured and during 2014, the 4 percent Eurobond 2014 with the principal of EUR 500 million matured.

During 2015, Syngenta issued an unsecured non-current 12 year EUR 500 million security with a fixed interest rate of 1.25%.

During 2014, Syngenta issued five unsecured non-current bonds denominated in Euro and Swiss franc with varying maturities and notional amounts under the Euro Medium Term Note (EMTN) program. The issuances in the Swiss market consisted of a 5 year CHF

27. Risk management of financial risks continued

350 million security with a fixed interest rate of 0.75 percent, a 10 year CHF 250 million security with a fixed interest rate of 1.63 percent, and a 15 year CHF 150 million security with a fixed interest rate of 2.13 percent. The Euro-denominated debt consisted of a 7 year EUR 500 million security with a fixed interest rate of 1.88 percent and a 3 year EUR 250 million floating rate note with a 0.25 percent interest mark-up on EURIBOR.

The following table shows Syngenta's contractually agreed (undiscounted) interest and principal repayments on long-term financing-related non-derivative financial liabilities and the related derivatives held at December 31, 2015 and 2014. Non-derivative financial liabilities are recorded at amortized cost (less related issuance costs) unless subject to fair value hedge accounting, in which case the liability is adjusted for the change in fair value of the hedged risk to the extent the hedge relationship is effective. Derivative financial liabilities are recorded at fair value. The table therefore shows the total carrying amount of Syngenta's financial debt adjusted for the effect, if any, of applying fair value hedge accounting.

2015 (\$m)	Non-derivative financial liabilities (Unsecured bonds and notes)				Derivative financial liabilities (Interest rate and cross-currency swaps)			
	Fixed rate interest	Variable rate interest	Principal repayment	Total	Fixed rate interest	Variable rate interest	Repayment ¹	Total
Less than 1 year	67	1	–	68	38	4	–	42
1-3 years	134	1	273	408	76	6	72	154
3-5 years	131	–	427	558	68	–	43	111
5-10 years	196	–	1,372	1,568	113	–	131	244
More than 10 years	257	–	1,047	1,304	40	–	32	72
Total payments	785	2	3,119	3,906	335	10	278	623
Net carrying amount				3,137				267

2014 (\$m)	Non-derivative financial liabilities (Unsecured bonds and notes)				Derivative financial liabilities (Interest rate and cross-currency swaps)			
	Fixed rate interest	Variable rate interest	Principal repayment	Total	Fixed rate interest	Variable rate interest	Repayment ¹	Total
Less than 1 year	69	2	608	679	18	2	33	53
1-3 years	123	4	304	431	51	10	41	102
3-5 years	122	–	354	476	51	–	42	93
5-10 years	198	–	1,436	1,634	68	–	87	155
More than 10 years	269	–	577	846	21	–	18	39
Total payments	781	6	3,279	4,066	209	12	221	442
Net carrying amount				3,302				201

¹ The repayments above (and the net carrying amount of the derivative financial liabilities) do not include the amounts paid as collateral

Forecast data for liabilities that may be incurred in the future is not included in the table above. Amounts in foreign currency were translated to US dollars at the closing rate at the reporting date. Variable payments at each year end arising from financial instruments were calculated based on the forward interest rate yield curve and the spread that Syngenta pays on its outstanding debt and open derivatives at December 31, 2015 and 2014, respectively. Non-derivative financial liabilities, repayment of which can be demanded by the counterparty at any time, have been assigned to the earliest repayment period.

Capital structure

Absent major acquisitions, Syngenta targets maintaining a solid investment grade credit rating, as recognized by major third-party rating agencies, which it currently believes provides an optimal balance between financial flexibility and the cost of capital. Syngenta manages capital by monitoring levels of net debt, as calculated below, and equity against targets. During 2015, Syngenta redefined net debt to exclude financing-related derivatives as these are now offset by the financial assets and liabilities arising from collateral paid and received under CSA agreements. Capital is returned to shareholders primarily through dividend payments, with the aim of continuous dividend growth, complemented by tactical share repurchases.

The net debt to equity ratio was 31 percent at December 31, 2015 (25 percent at December 31, 2014²).

27. Risk management of financial risks continued

The components of net debt at December 31, 2015 and 2014 are as follows:

(\$m)	2015	2014 ²
Current financial debt	547	1,137
Non-current financial debt	3,183	2,752
Cash and cash equivalents	(1,141)	(1,638)
Marketable securities ¹	(3)	(3)
Net debt at December 31	2,586	2,248

1 Included within 'Derivative and other financial assets' and 'Financial and other non-current assets'

2 Under the definition of net debt used in 2014, net debt was \$2,423 million, including \$175 million of financing-related derivatives, and the net debt to equity ratio was 27 percent

28. Financial assets and liabilities

The following tables show the carrying amounts and fair values of financial assets and liabilities by category of financial instrument and reconciliation to where they are presented in the balance sheet at December 31, 2015 and 2014. The fair value hierarchy level is shown for those financial assets and liabilities that are carried at fair value in the balance sheet.

2015 (\$m)	Carrying amount (based on measurement basis)			Total ¹	Comparison fair value
	Amortized cost	Fair value level 1	Fair value level 2 ¹		
Cash and cash equivalents	1,141	–	–	1,141	1,141 ²
Trade receivables, net:					
At amortized cost	4,023	–	–	4,023	4,023 ²
Mandatorily measured at fair value through profit or loss	–	–	105	105	105
Total				4,128	4,128
Other accounts receivable:					
Financial assets	384	–	–	384	384 ²
Non-financial assets	–	–	–	461	– ³
Total				845	
Derivative and other financial assets:					
Derivative financial assets ⁴	–	6	128	134	134
Other current financial assets	267	–	–	267	267 ²
Total				401	401
Financial and other non-current assets:					
Loans, receivables and pooled investments	45	51	7	103	103 ⁵
Equity investments at fair value through OCI	–	2	71	73	73
Other, not carried at fair value	–	–	–	191	– ³
Derivative financial assets ⁴	–	–	29	29	29
Total				396	
Trade accounts payable	3,311	–	–	3,311	3,311 ²
Current financial debt and other financial liabilities:					
Non-derivative financial liabilities	615	–	–	615	615 ²
Derivative financial liabilities ⁴	–	–	115	115	115
Total				730	730
Other current liabilities:					
Financial liabilities	209	–	–	209	209 ²
Non-financial liabilities	–	–	–	774	– ³
Total				983	
Financial debt and other non-current liabilities:					
Non-derivative financial liabilities	3,197	–	–	3,197	3,218 ⁶
Derivative financial liabilities ⁴	–	–	267	267	267
Non-financial liabilities	–	–	–	37	– ³
Total				3,501	

1 The totals for equity investments at fair value through OCI include \$71 million of level 3 investments, mainly within Syngenta's venture business unit, presented in the level 2 column in the table above. The main valuation input for these investments is the price from their most recent shareholder financing transactions. Gains, losses, additions to and disposals of these investments were immaterial

2 Carrying amount approximates the estimated fair value due to the short-term nature of the financial instruments

3 Fair value is not required to be disclosed for non-financial assets and non-financial liabilities, including defined benefit pension assets

4 Derivative financial assets and liabilities are measured at fair value through profit or loss except that gains and losses on cash flow hedges of forecast transactions are not recognized in profit or loss until the hedged transaction is recognized in profit or loss

5 Fair values of these receivables are measured by discounting their cash flows at interest rates derived using observable yields on government bonds with maturities and currencies that match those of the respective receivable and the estimated credit risk of each receivable. The total fair value disclosed is due from counterparties that have not issued traded bonds and represents a level 3 fair value measurement

6 Financial liabilities represent both exchange traded bonds and non-exchange traded private placement notes issued by Syngenta. The fair value disclosed consists of level 2 fair value measurements derived from observable price quotations for these bonds, except for one private placement note with a fair value of \$147 million, which is a level 3 measurement because market interest rates and credit rates are not observable for the full period through to its maturity date in 2035

28. Financial assets and liabilities continued

2014 (\$m)	Carrying amount (based on measurement basis)			Total ¹	Comparison fair value
	Amortized cost	Fair value level 1	Fair value level 2 ¹		
Cash and cash equivalents	1,638	–	–	1,638	1,638 ²
Trade receivables, net:					
At amortized cost	3,507	–	–	3,507	3,507 ²
Mandatorily measured at fair value through profit or loss	–	–	191	191	191
Total				3,698	3,698
Other accounts receivable:					
Financial assets	321	–	–	321	321 ²
Non-financial assets	–	–	–	426	– ³
Total				747	
Derivative and other financial assets:					
Derivative financial assets ⁴	–	5	212	217	217
Other current financial assets	160	–	–	160	160 ²
Total				377	377
Financial and other non-current assets:					
Loans, receivables and pooled investments	237	–	7	244	261 ⁵
Equity investments at fair value through OCI	–	5	66	71	71
Other, not carried at fair value	–	–	–	77	– ³
Derivative financial assets ⁴	–	–	28	28	28
Total				420	
Trade accounts payable	3,472	–	–	3,472	3,472 ²
Current financial debt and other financial liabilities:					
Non-derivative financial liabilities	1,151	–	–	1,151	1,151 ²
Derivative financial liabilities ⁴	–	1	177	178	178
Total				1,329	1,329
Other current liabilities:					
Financial liabilities	258	–	–	258	258 ²
Non-financial liabilities	–	–	–	726	– ³
Total				984	
Financial debt and other non-current liabilities:					
Non-derivative financial liabilities	2,766	–	–	2,766	2,877 ⁶
Derivative financial liabilities ⁴	–	–	175	175	175
Non-financial liabilities	–	–	–	35	– ³
Total				2,976	

1 The totals for equity investments at fair value through OCI include \$66 million of level 3 investments, mainly within Syngenta's venture business unit, presented in the level 2 column in the table above. The main valuation input for these investments is the price from their most recent shareholder financing transactions. Gains, losses, additions to and disposals of these investments were immaterial

2 Carrying amount approximates the estimated fair value due to the short-term nature of the financial instruments

3 Fair value is not required to be disclosed for non-financial assets and non-financial liabilities, including defined benefit pension assets

4 Derivative financial assets and liabilities are measured at fair value through profit or loss except that gains and losses on cash flow hedges of forecast transactions are not recognized in profit or loss until the hedged transaction is recognized in profit or loss

5 Fair values of these receivables are measured by discounting their cash flows at interest rates derived using observable yields on government bonds with maturities and currencies that match those of the respective receivable and the estimated credit risk of each receivable. Of the total fair value disclosed, \$136 million represents a level 2 fair value measurement because credit risk was determined from yields on actively traded bonds issued by the counterparty, and \$125 million, which is due from counterparties that have not issued traded bonds, represents a level 3 fair value measurement

6 Financial liabilities represent both exchange traded bonds and non-exchange traded private placement notes issued by Syngenta. The fair value disclosed consists of level 2 fair value measurements derived from observable price quotations for these bonds, except for one private placement note with a fair value of \$127 million, which is a level 3 measurement because market interest rates and credit rates are not observable for the full period through to its maturity date in 2035

28. Financial assets and liabilities continued

The levels of fair value hierarchy used above are defined as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data.

The fair values of equity shareholdings subject to a lock-up period where the underlying shares are actively traded on a stock exchange is derived by applying a discount to the market price and are classified as level 2. They are reclassified as level 1 on expiry of the lock-up period. In 2015, there were no transfers between level 1 and level 2 of the fair value hierarchy or between the fair value and amortized cost categories. In 2014, one equity shareholding of \$35 million was reclassified from level 2 to level 1; part of this shareholding was then sold for \$13 million. There were no transfers during the years ended December 31, 2015, 2014 and 2013 into or out of level 3 of the fair value hierarchy.

Income, expense, gains and losses relating to financial instruments recognized in profit or loss during the years ended December 31, 2015, 2014 and 2013 are as follows:

2015 (\$m)	Amortized cost loans and receivables ¹	Equity investments at fair value through OCI	Derivative assets and liabilities	Liabilities carried at amortized cost	Total
Recognized within Financial expense, net ² :					
Interest income	150	–	–	–	150
Interest expense	(6)	–	(31)	(132)	(169)
Currency gains/(losses), net	–	–	(215)	–	(215)
Recognized within Operating income:					
Impairment charges	(76)	–	–	–	(76)
Total	68	–	(246)	(132)	(310)

2014 (\$m)	Amortized cost loans and receivables ¹	Equity investments at fair value through OCI	Derivative assets and liabilities	Liabilities carried at amortized cost	Total
Recognized within Financial expense, net ² :					
Interest income	152	–	–	–	152
Interest expense	(6)	–	(18)	(171)	(195)
Currency gains/(losses), net	–	–	(139)	–	(139)
Recognized within Operating income:					
Impairment charges	(67)	–	–	–	(67)
Total	79	–	(157)	(171)	(249)

2013 (\$m)	Amortized cost loans and receivables ¹	Equity investments	Derivative assets and liabilities	Liabilities carried at amortized cost	Total
Recognized within Financial expense, net ² :					
Interest income	120	–	–	–	120
Interest expense	(5)	–	(8)	(151)	(164)
Currency gains/(losses), net	–	–	(134)	–	(134)
Recognized within Operating income:					
Impairment charges	(33)	(11)	–	–	(44)
Total	82	(11)	(142)	(151)	(222)

¹ Includes immaterial amounts relating to financial assets classified as at fair value through profit or loss

² Financial expense, net also includes \$22 million of bank charges (2014: \$35 million; 2013: \$22 million)

Reported gains and (losses) recognized in OCI on revaluation of equity investments that were designated at fair value through OCI were \$(3) million, \$(33) million and \$17 million for the years ended December 31, 2015, 2014 and 2013, respectively.

29. New IFRSs and accounting policies

New IFRSs

Syngenta has adopted the “Annual Improvements” amendments to IFRSs, 2010-2012 and 2011-2013 cycles, with effect from January 1, 2015. The adoption of these amendments had no impact on these consolidated financial statements.

The relevant new or revised IFRSs that Syngenta has not yet adopted are the following:

IFRS 9 “Financial Instruments” was published in July 2014. IFRS 9 was published in stages and Syngenta early adopted an earlier version, IFRS 9 (December 2013) in 2014. The July 2014 version of IFRS 9 is the complete and final version and contains certain revisions to the financial asset classification and measurement requirements in the December 2013 version, the most important being the addition of a third business model for asset classification with objectives of both collecting contractual cash flows from the assets and selling the assets. On the basis of the financial assets it holds at December 31, 2015, Syngenta does not believe these revisions will have a material impact on its consolidated financial statements. The July 2014 version of IFRS 9 also contains requirements for financial asset impairment that will replace the currently applicable equivalent IAS 39 guidance. Under the new impairment requirements, Syngenta will record allowances for expected credit losses on its financial assets. Syngenta’s largest category of financial assets is its trade receivables, which, except for immaterial amounts, have credit terms of less than 12 months. Under the new requirements, an allowance will be recognized equal to the credit losses Syngenta expects to incur over the lifetime of the trade receivables. This may result in earlier recognition of loss allowances, because under the current guidance credit losses are not recognized until they are incurred. IFRS 9 (July 2014) is effective January 1, 2018 and the new impairment requirements must be applied retrospectively, but restatement of prior periods upon adoption is not required. Syngenta is assessing the impact that the new impairment requirements will have on its financial statements. However, it is not possible at this time to assess whether that impact is likely to be material.

IFRS 15 “Revenue from Contracts with Customers” was published in May 2014, and contains a single comprehensive set of requirements for the recognition of revenue. Under IFRS 15, reported revenue will represent the transfer of promised goods or services to customers in an amount that reflects the consideration to which Syngenta expects to be entitled in exchange for those goods or services. The recognition requirements relating to contracts where revenue is variable, which for Syngenta include both product sales and licensing agreements, have been expanded significantly in IFRS 15. Each licensing contract Syngenta enters into has unique terms and certain licensing contracts may involve significant upfront or milestone payments.

Based on the current text of IFRS 15 and Syngenta’s existing contracts with its customers, Syngenta believes that those sales which it currently recognizes when distributors sell Syngenta products to their customers, as described in its revenue recognition accounting policy below, will be recognized earlier in accordance with IFRS 15, at the time Syngenta sells to the distributor, subject to provision for sales returns. At January 1, 2015, the unrecognized amount of these sales was \$437 million. At December 31, 2015, the amount had reduced to \$35 million, mainly because of the change in sales terms in Brazil described in Note 2. On adopting IFRS 15, Syngenta will account for these sales in accordance with the transitional requirements of that standard, which are currently subject to the outcome of the IASB’s Exposure draft proposals. IFRS 15 allows transition either by retrospective application to and restatement of prior periods, or by a one-time catch-up adjustment to retained earnings. Under the retrospective transition method, retained earnings would be increased by the net income resulting from the amount of unrecognized sales at the start of the earliest comparative period presented in the financial statements in which Syngenta first applies IFRS 15, and the comparative consolidated income statements presented in those financial statements would be restated accordingly. Under the catch-up method, retained earnings at the start of the year of adoption would be increased, and comparative income statements would not be restated. Syngenta must adopt IFRS 15 by January 1, 2018 at the latest. Early adoption is permitted. Syngenta has not made a final decision whether to adopt the standard early or which transition method to select. When the retrospective application transition model is applied, completed contracts which began and ended within the same annual reporting period need not be restated.

In respect of all sales other than the distributor sales referred to above, Syngenta does not believe that adoption of the current text of IFRS 15 will have a material effect on its financial statements. Syngenta will, however, need to assess the effect of any amendments that may arise from the IASB’s Exposure Draft of proposals to modify IFRS 15. Those proposals would modify the IFRS 15 guidance relating to licensing, identifying distinct promised goods or services within a contract and identifying whether Syngenta is a principal or an agent in contracts in which customers receive rights to third party products and services.

IFRS 16 “Leases”, was published in January 2016, and requires a lessee to account for all leases by recognizing an asset for the right to use the leased asset and a corresponding liability for lease payments during the lease term, which is defined as the non-cancellable period of the lease and any additional periods for which the lessee has an option to use the asset that it is reasonably certain to exercise. Leases with a term of less than one year and leases of certain small value assets are exempt from these requirements and will continue to be accounted for in the same way as operating leases under the current IAS 17. The liability for lease payments will be the present value of payments required over the lease term, excluding contingent payments and payments for services associated with the lease. Lease expense will be attributed to accounting periods in the same way as for finance leases under the current IAS 17. Syngenta must adopt IFRS 16 by January 1, 2019 at the latest. Early adoption is permitted on condition that IFRS 15 is also adopted on or before the date IFRS 16 is adopted. IFRS 16 allows transition either by retrospective application to and restatement of prior periods, or by a modified retrospective application method under which IFRS 16 is applied to all leases with a remaining term of more than one year upon adoption by making a one-time catch-up adjustment to retained earnings, and prior periods are not restated. Syngenta is currently assessing the impact on its financial statements of IFRS 16, including the requirement to recognize an asset and a liability for leases that it currently classifies as operating leases and for which it therefore does not recognize a lease asset or liability at present. Syngenta’s minimum commitments under its existing operating leases are disclosed in Note 25.

“Accounting for Acquisitions of Interests in Joint Operations”, Amendments to IFRS 11, was issued in May 2014 and clarifies that the acquisition accounting and disclosure requirements of IFRS 3 “Business Combinations” must be applied to the acquisitions of an interest in a joint operation. Syngenta is required to apply the amendments prospectively from January 1, 2016. After this date, it would be possible to assess the impact on Syngenta if it were to acquire an interest in a joint operation.

29. New IFRSs and accounting policies continued

“Clarification of Acceptable Methods of Depreciation and Amortization”, Amendments to IAS 16 and IAS 38, was issued in May 2014. The amendments state that a unit of revenue depreciation method for property, plant and equipment is inappropriate, and that a unit of revenue amortization method for intangible assets is presumed to be inappropriate unless the economic benefits derived from the asset are highly correlated with revenues or the asset’s use is conditional on a measure of revenue such as a threshold amount. Syngenta is required to apply the amendments prospectively from January 1, 2016. Syngenta does not expect the amendments to have a material impact on its consolidated financial statements.

“Agriculture: Bearer Plants” Amendments to IAS 16 and IAS 41, issued June 2014, requires bearer plants to be accounted for and reported as property, plant and equipment instead of as biological assets. Syngenta is required to apply the amendments from January 1, 2016. At December 31, 2015, the amounts of bearer plants reported by Syngenta were not material and Syngenta does not expect the amendments to have a material impact on its consolidated financial statements.

The “Annual Improvements to IFRSs” amendments for the 2012-14 annual improvement cycles were issued in September 2014, Syngenta must adopt the amendments with effect from January 1, 2016. Syngenta does not believe that the amendments will have a material impact on its consolidated financial statements.

“Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”, Amendments to IFRS 10 and IAS 28, was issued in September 2014 and requires Syngenta to recognize gains and losses on such sales or contributions only to the extent they relate to the interest in the Associate or Joint Venture that is held by investors other than Syngenta. Syngenta is required to apply the amendments prospectively from January 1, 2016, although the IASB has published an Exposure Draft proposing to postpone mandatory application indefinitely. Based on the Associates and Joint Ventures in which it has investments at December 31, 2015, Syngenta does not believe that the amendments will have a material impact on its consolidated financial statements.

“Disclosure Initiative”, amendments to IAS 1, was issued in December 2014, and amends guidance for presenting gains and losses recognized in OCI by associates and joint ventures, presenting the notes to the financial statements and including additional line items and subtotals in financial statements. Syngenta is required to apply the amendments from January 1, 2016. Syngenta does not believe that the amendments will have a material impact on the presentation of its consolidated financial statements.

“Recognition of Deferred Tax Assets for Unrealised Losses”, Amendments to IAS 12, was published in January 2016, and clarifies that for deferred income tax accounting purposes an entity may assume that an asset will be realized for more than its carrying amount if that outcome is supported by sufficient evidence. Syngenta must adopt the amendments by January 1, 2017. Syngenta is currently assessing the impact on its financial statements of the amendments.

“Disclosure Initiative”, amendments to IAS 7, was issued in January 2016, and introduces a new requirement for Syngenta to disclose changes in liabilities arising from financing activities, including separate disclosure of changes arising from cash flows and non-cash changes. Syngenta is required to apply the amendments from January 1, 2017.

Principles of consolidation

Subsidiaries

Subsidiaries are those entities which Syngenta controls. Syngenta controls all its subsidiaries through ownership of a majority of their voting rights. Syngenta fully consolidates the income, expenses, assets, liabilities and cash flows of subsidiaries from the date it acquires control up to the date control ceases. Intercompany transactions and balances are eliminated upon consolidation.

Associates and joint ventures

Syngenta has no interests in entities that it does not consolidate that would meet the definition of joint operations. Syngenta accounts for both associates and joint ventures using the equity method.

Business combinations

Syngenta accounts for business combinations in accordance with IFRS 3, (revised January 2008), using the acquisition method. At the date it acquires control of another business, Syngenta records the fair value of the agreed consideration payable, including the estimated fair value of any contingent consideration and of any pre-existing ownership interest it holds in the acquired entity. Directly attributable acquisition transaction costs are expensed as incurred. The assets and liabilities of acquired businesses are identified and recorded in the consolidated financial statements at their acquisition date fair values, with certain exceptions as set out in IFRS 3. Acquired intangible assets are generally valued based on the income approach: the relief from royalty method is generally used for brand names and product technology rights, and the residual income method for customer relationships. Acquired land and buildings are valued based on the market approach and specialized plant and equipment based on the cost approach. Non-controlling interests which either consist of actively traded financial instruments or which do not represent a proportionate ownership interest in the acquired entity to which they relate are recorded at their fair value. All other non-controlling interests are recorded at their proportionate share of the fair value of the acquired business’s net assets.

Other accounting policies

Foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the rate prevailing at the balance sheet date. Non-monetary assets and liabilities denominated in foreign currencies, stated at historical cost or fair value, are translated into the functional currency at the foreign exchange rate prevailing at the date of the transaction or the date the fair value was determined, respectively. Foreign currency transactions are translated into the relevant functional currency at the exchange rate prevailing at the date of the transaction. With exceptions for certain regional supply centers, holding and finance subsidiaries, each Syngenta subsidiary uses the local currency of its country of operations as its functional currency. Unrealized gains or losses related to equity loans, designated cash flow and net investment hedging arrangements and gains and losses on remeasuring equity investments designated at fair value through OCI are recognized in OCI. All other resulting foreign exchange transaction gains and losses are recognized in profit or loss. Equity loans are intercompany loans to subsidiaries that are not expected to be repaid in the foreseeable future and therefore considered part of Syngenta’s net investment in the subsidiary.

29. New IFRSs and accounting policies continued

Income, expense and cash flows of foreign operations are translated into US dollars using average exchange rates prevailing during the period. Assets and liabilities of foreign operations are translated to US dollars using exchange rates prevailing at the balance sheet date. Foreign exchange differences arising on these translations are recognized directly in OCI. The consolidated historical cost of inventories that have been transferred between Syngenta group entities since their initial purchase or manufacture is measured by translating the currencies in which the costs of purchase or manufacture were incurred into US dollars at the exchange rates prevailing at the date when those costs were incurred, and foreign exchange differences arising on retranslating these amounts to US dollars at the rates at the balance sheet date or the date the inventories were sold, as applicable, are recognized in OCI. Upon disposal or loss of control of a foreign subsidiary, the cumulative currency translation difference relating to the subsidiary is reclassified from equity to profit or loss as part of the gain or loss on disposal.

Revenue

Revenue is measured as the fair value of the consideration received or receivable. If the consideration is receivable more than 12 months after the transaction date and the effect of discounting is material, the revenue amount recognized is discounted to its present value at the transaction date and the unwinding of this discount is recognized as financial income over the period until the date the consideration is due. Revenue from sales of goods is recognized in the income statement when the significant risks and rewards of ownership have been transferred to the buyer, which is usually upon delivery, at a fixed or determinable price, and when collectability is reasonably assured. Delivery is defined based on the terms of the sale contract. Revenue is reported net of sales taxes, returns, discounts and rebates. Rebates to customers are provided for in the same period that the related sales are recorded based on the contract terms.

In certain markets, sales terms allow customers to exchange purchased products at a later date for other Syngenta products of their choice, to the same value. Revenue is recognized upon delivery of the original products, and is reduced by a provision for products expected to be exchanged. This provision is released, and the corresponding revenue is recorded, when the substitute products are delivered or the period available to exchange the products expires, whichever is earlier.

In certain markets, sales terms allow customers the option of a one-time, non-repeatable extension of credit, for a defined additional period, in respect of a defined proportion of purchases made during a defined period, if the customers still have the inventories on hand upon expiration of the initial agreed credit period. Customers have no right to return these inventories, and must pay unconditionally when the additional credit period expires. In accordance with IAS 18, revenue for these sales is recognized upon product delivery.

Where a right of return exists, revenue is recognized when a reasonable estimate of returns can be made, or when the right of return expires, whichever is earlier. Where Syngenta's distributors hold inventories and have the right of return, or Syngenta's commercial practice is to accept returns from distributors, and it is not possible to make a reasonable estimate of returns, Syngenta recognizes revenue when its distributors sell the inventories to their customers.

Where third parties hold Syngenta inventories on a consignment basis, revenue is recognized in the period that inventories are withdrawn from consignment and delivered to customers.

Syngenta periodically enters into prepayment contracts with customers whereby it receives advance payments for products to be delivered in a future period. These advance payments are recorded as liabilities and presented as part of Trade accounts payable. Advance payment liabilities are released and revenues associated with such advance payment transactions are recognized upon delivery of and transfer of title, ownership, and risk of loss of the related products to the customer.

Royalty and license income is recognized when earned. If the license agreement contains performance obligations for Syngenta, the related income is considered earned when Syngenta has performed the obligations. Contractual minimum royalty income and non-refundable lump sum payments are considered earned when there are no substantive performance obligations or contingencies associated with their receipt other than the passage of time. Amounts received in advance of performance or which may be refundable dependent on future performance are deferred in the consolidated balance sheet. If the license agreement provides for royalties based on sales made by the licensee, the related income is considered earned in the period that the related sales occur.

Cash rebates and discounts granted to customers are classified as a reduction of revenue. Awards of free or discounted products or services supplied by Syngenta in connection with customer loyalty programs are recognized as revenue when the customer redeems the credits. Awards supplied by a third party are recognized as revenue when the third party becomes obliged to supply the awards if Syngenta is an agent for the third party, and when Syngenta has performed its obligations to the customer if Syngenta is a principal. Net profit from programs where Syngenta is an agent is shown as part of Sales. Revenue related to programs where Syngenta is a principal is presented as part of Sales, and associated costs are presented within Cost of goods sold or Marketing and distribution expense as appropriate. Syngenta determines whether it is a principal or an agent according to whether it is exposed to the risks and rewards of supplying the third party products or services, in particular inventory holding risk. Liabilities associated with customer loyalty programs are classified within Trade accounts payable.

Barter transactions

For certain customers in certain markets, trade receivables are settled either with proceeds from sales by such customers of agricultural commodities or by delivery of commodities to Syngenta by such customers. For these arrangements, Syngenta recognizes revenue when it has a legally enforceable receivable, the amount of which is reliably measurable based on an agreed price for the Syngenta products. Where Syngenta has a contract with the customer for physical delivery of a commodity at a fixed price, an embedded derivative is recognized for the fair value of the contract until physical delivery. When it subsequently sells the commodity, Syngenta classifies additional revenue as sales only to the extent that the original contract for the sale of Syngenta products included revenue that was contingent upon the commodity sales proceeds. Any remaining gains or losses on the commodity sale are recorded in Marketing and distribution expense in the consolidated income statement.

29. New IFRSs and accounting policies continued

Research and development

Research expenses are charged to the consolidated income statement when incurred. Internal development costs are capitalized as intangible assets only when there is an identifiable asset that can be completed and is expected to generate future economic benefits and when the cost of such an asset can be measured reliably. Costs incurred internally to develop new chemical or biological crop protection products based on active ingredients that have not yet obtained regulatory approval, or to develop new seed varieties which contain new traits that have not yet obtained regulatory approval, are expensed as incurred because of the uncertainty inherent in the outcome of the regulatory approval process. Costs incurred in the design, construction and testing of new or improved production processes that do not themselves require regulatory approval and that can be applied to products which have already obtained approval are capitalized if the processes are technically feasible, Syngenta intends and has sufficient resources to complete the development, the process will generate future economic benefits, and expenditure attributable to developing the process can be measured reliably. Development expenses Syngenta incurs to develop technology on behalf of a third party under a collaboration agreement are capitalized and amortized over the agreement term if Syngenta expects to recover the costs under the terms in that agreement.

Costs of purchasing distribution rights, patent rights and licenses to use or sell products, or technology or registration data are capitalized as intangible assets. Costs of applying for patents for internally developed products, costs of defending existing patents and costs of challenging patents held by third parties where these are considered invalid, are considered part of development expense and expensed as incurred.

Expenses by function

Cost of goods sold includes costs of purchasing and producing inventories that have been sold to third parties, inbound and inter-site distribution expenses, impairment of inventories, environmental remediation costs associated with ongoing Syngenta manufacturing sites, and general overhead expenses of Syngenta's Production and Supply function which are expensed as incurred. Marketing and distribution includes costs of selling products, providing technical support for products sold, marketing and promotional expenses, distribution of finished products to third party customers, and impairment of trade and other receivables. Research and development includes the expenses of Syngenta's research sites and third party research collaboration agreements, expenses incurred during the regulatory process for Syngenta products and the costs of Syngenta's global field trials organization. General and administrative includes expenses of general management, finance, human resources, information systems, legal affairs and taxes, corporate affairs and communications, business planning and corporate development functions. Services provided by these departments to the Production and Supply, Marketing and Distribution and Research and Development functions are allocated to and included within those other functions. Gains and losses arising on routine asset disposals and gains and losses reclassified from OCI when hedged forecast foreign currency trading transactions affect profit or loss are also reported within General and administrative. Restructuring is a separate general and administrative function as it is managed through a project management office which is accountable to the Executive Committee. Impairment of property, plant and equipment that results from restructuring plans, rather than ongoing activities of the functions responsible for the assets, is included in Restructuring. Impairment of goodwill and intangible assets is also included in Restructuring unless a specific function is accountable for the impairment loss. Non-current asset depreciation and amortization are charged to the functions responsible for the related assets.

Restructuring

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the effects of analyzing and preparing for potential industry consolidation transactions as well as completing and integrating significant business combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded.

Income taxes

Income taxes for the year comprise current and deferred taxes, calculated using rates enacted or substantively enacted at the balance sheet date. Current tax is the expected tax payable on taxable income for the year and any adjustments to tax payable in respect of previous years. Deferred tax is recognized using the liability method and thus is calculated on temporary differences between the tax bases of assets and liabilities and their respective carrying amounts in the consolidated balance sheet.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the difference will not reverse in the foreseeable future. Deferred tax liabilities are not recognized on the initial recognition of goodwill if the carrying amount of goodwill exceeds its tax base. Deferred tax assets, including those related to unused tax losses, are recognized to the extent that it is probable that future taxable profit will be available against which the assets can be utilized. Income tax expense, current and deferred, is recognized in profit or loss unless it relates to items recognized in OCI or in equity in which case the tax expense is also recognized in OCI or equity, respectively.

Syngenta's policy is to comply fully with applicable tax regulations in all jurisdictions in which Syngenta's operations are subject to income taxes. Syngenta's estimates of current income tax expense and liabilities are calculated assuming that all tax computations filed by Syngenta's subsidiaries will be subject to review or audit by the relevant tax authorities. Syngenta and the relevant tax authorities may have different interpretations of how regulations should be applied to actual transactions. Syngenta records provisions for taxes it estimates will ultimately be payable when the reviews or audits have been completed, including allowances for any interest and penalties which may become payable. Syngenta releases these provisions when the tax audit of the applicable year is completed or an Advance Pricing Agreement (APA) settlement is reached that impacts previous years' tax payments, or otherwise when the statute of limitations for the applicable year expires, unless there is evident reason for earlier release.

29. New IFRSs and accounting policies continued

Financial Instruments

Syngenta early adopted IFRS 9 (2013) with effect from January 1, 2014.

Trade and other accounts receivable

Trade and other accounts receivable include invoiced amounts less adjustments for doubtful receivables which are estimated by taking into account whether receivables are past due based on contractual terms, payment history and other available evidence of collectability. Receivable balances are written off only when there is no realistic prospect of their being collected.

Factoring arrangements transferring substantially all economic risks and rewards associated with accounts receivable to a third party are accounted for by derecognizing the accounts receivable upon receiving the cash proceeds of the factoring arrangement. Factoring arrangements that transfer to a third party some, but not substantially all economic risks and rewards are accounted for by continuing to recognize Syngenta's continuing rights over the receivable and by recognizing any related obligation to the third party factor.

Trade receivables are classified as and measured at amortized cost, less adjustments for doubtful receivables as described above, in accordance with IFRS 9. Syngenta holds trade receivables to collect their contractual cash flows, which consist solely of payments of principal and, where applicable, interest, except for certain foreign currency sales transactions in which Syngenta offers to its customers a written exchange rate option embedded into the sales contract. Trade receivable/option contracts that result from these foreign currency sales transactions are classified as at fair value through profit or loss. The fair value of these trade receivables is measured by:

- (a) remeasuring the embedded exchange rate option at fair value;
- (b) retranslating the underlying trade receivable into the selling entity's functional currency using closing spot exchange rates at the balance sheet date; and
- (c) adjusting the resulting carrying amount of the combined receivable contract to reflect changes in customer credit risk. Syngenta includes this adjustment in the provision for doubtful receivables.

Derivative and other financial instruments

Regular way purchases and sales of marketable securities are recognized at settlement date.

Financial assets and liabilities which have remaining contractual maturities of 12 months or less at the balance sheet date are presented within Total current assets and Total current liabilities, respectively. Financial assets and liabilities which have remaining contractual maturities of more than 12 months are presented within Financial and other non-current assets and Financial debt and other non-current liabilities, respectively.

Equity investments in other entities which are not subsidiaries, associates or joint ventures of Syngenta are included in Financial and other non-current assets. They are classified and measured at fair value through OCI and are revalued to fair value at each reporting date, with all changes in fair value recognized within OCI. In Syngenta's opinion, presenting gains and losses on these investments in OCI is more consistent with Syngenta's strategic investment objectives than presenting those gains and losses within profit and loss. The fair value of equity investments traded in active markets is measured at the quoted price at the balance sheet date, multiplied by the number of shares held by Syngenta. The fair value of other equity investments is based on recent observable market transactions for equity shares in the investee company or, where there are no recent transactions, on valuation multiples for equity shares in similar companies, which are traded.

Other non-current receivables represent royalty and license receivables, loans to employees and other third parties, and amounts recoverable from third parties in reimbursement of environmental remediation and other costs. These receivables are stated at amortized cost, less provision for impairment where appropriate.

Financial debt is recognized initially at its fair value less transaction costs, which represents the net proceeds from issuing the debt. Subsequently, financial debt is stated at amortized cost using the effective interest method, except where subject to a fair value hedge relationship, in which case the carrying amount of the debt is adjusted by the change in the fair value of the hedged exposure during the hedge relationship.

Derivative financial instruments are recorded initially at their fair value when Syngenta becomes a party to the instrument. They are revalued to fair value at each reporting date and presented as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Fair values of publicly traded derivatives are based on quoted market prices of the specific instruments held at the balance sheet date.

Fair values of non-publicly traded derivatives are valued using accepted economic methodologies for pricing these financial instruments, such as discounted cash flow analysis or option pricing models. The valuation models seek to make maximum use of market inputs existing at the balance sheet date. The methods used to determine the fair value of specific types of non-publicly traded derivatives are as follows:

- Interest rate and cross-currency swaps are calculated as the present value of the estimated future cash flows. The future cash flows are determined using relevant market forward interest rates at the balance sheet date and are discounted using the zero-coupon rates with equivalent maturities for AA rated entities at the balance sheet date, as adjusted for the counterparty's credit risk. These discount rates incorporate the impact of net credit risk present in those derivative instruments. For cross-currency swaps, the discount rates reflect the impact of the currency basis on the future cash flows denominated in different currencies;
- Forward contracts are determined using relevant market exchange rates at the balance sheet date;
- Currency options are valued using the Black-Scholes-Merton option pricing model, which incorporates spot exchange rates, zero coupon rates with equivalent maturities for entities with credit ratings which approximate Syngenta's counterparty credit risk, and implied volatility in the market forward exchange rates at the balance sheet date; and
- Commodity options are valued using the Black-Scholes-Merton option pricing model, which incorporates future commodity price curves with equivalent maturities and implied volatilities in the commodities markets at the balance sheet date, adjusted for counterparty credit risk.

29. New IFRSs and accounting policies continued

Realized gains and losses on disposal of amortized cost financial assets, revaluation gains and losses on derivatives not designated as accounting hedges, and gains and losses corresponding to the ineffective portion of derivatives designated as accounting hedges are recorded in profit or loss as they arise.

Syngenta applies hedge accounting as follows:

Fair value hedges

The designated hedging instruments are remeasured to fair value and the underlying hedged items are remeasured by the amount of change in the fair value of the hedged risk. The resulting remeasurement gains or losses are recognized in profit or loss as they occur.

Cash flow hedges

For the effective portion of the hedge, gains and losses on remeasuring designated hedging instruments to fair value are recognized in OCI as part of the cash flow hedge reserve, and are reclassified into profit or loss in the period (or periods) during which the underlying hedged cash flows affect profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for cash flow hedge accounting, any cumulative unrealized gain or loss on the hedging instrument remains in equity until the underlying hedged item affects profit or loss. However, if a hedged forecasted transaction is no longer expected to occur, the cumulative unrealized gain or loss on the hedging instrument is immediately reclassified into profit or loss.

Time value of options

When Syngenta designates a derivative financial instrument that is, or contains, an option as a hedging instrument in a hedge accounting relationship, the time value of the options as measured using the Black-Scholes-Merton option pricing model is excluded from the hedge designation and accounted for as a cost of hedging, as follows. The change in the fair value of the option during its term is recognized in OCI to the extent that the option terms are aligned with the attributes of the hedged exposure. If the hedged item is a transaction, the cumulative change in time value is included in the initial carrying amount of any non-financial asset or liability recognized when the hedged transaction occurs, or otherwise is recognized in profit and loss when the cash flows from the hedged transaction affect profit and loss. If the hedged item is a risk that may affect profit or loss during the option term, the cumulative amount recognized in OCI is amortized into profit and loss on a straight line basis over the option term.

Inventories

Purchased products are recorded at acquisition cost while own-manufactured products are recorded at manufacturing cost including a share of production overheads based on normal capacity. Cost of inventories is determined on a first-in-first-out basis. Allowances are made for inventories with a net realizable value less than cost, or which are slow moving. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and costs to sell. Costs to sell include direct marketing, selling and distribution costs. Unsaleable inventories are fully written off.

Biological assets

Biological assets represent growing plants and cuttings in Syngenta's Flowers business and sugar cane seedlings within its Sugar cane business. In Flowers, young plants and cuttings are measured at fair value less costs to sell, with key inputs being current average third party net selling prices, actual average selling costs and, for immature assets, estimated stage of growth relative to mature assets. Sugar cane seedlings are measured at cost less impairment because fair value is not reliably measurable due to the nature of the asset not corresponding to traded assets or products in the market. The carrying amount of current consumable biological assets measured using the cost model is tested for impairment by comparing it with the assets' net realizable value determined in accordance with IAS 2, "Inventories". Non-current bearer biological assets, which are measured using the cost model, are amortized over their productive lives on a straight-line basis. When indicators of impairment exist, their carrying amount is compared with the assets' recoverable amount determined in accordance with IAS 36, "Impairment of Assets". Syngenta classifies gains and losses from remeasuring biological assets to fair value, and impairment losses for biological assets measured at cost less impairment, within Cost of goods sold.

29. New IFRSs and accounting policies continued

Property, plant and equipment

Property, plant and equipment are recorded at acquisition or production cost, less accumulated depreciation and any impairment losses. Eligible borrowing costs are capitalized as part of the asset cost if construction is expected to take more than one year to complete. Capitalization ceases when the asset is ready for its intended use. Depreciation is charged on a straight-line basis to the income statement, starting from the date the asset is ready for use, over the following estimated useful lives:

Buildings	20 to 40 years
Machinery and equipment	10 to 25 years
Furniture and vehicles	5 to 20 years
Computer hardware	3 to 7 years

Land is recorded at acquisition cost and is not subject to depreciation.

Expenditures made for existing property, plant and equipment that will provide future economic benefit are capitalized and depreciated over the revised remaining useful life of the asset.

Leases

Property, plant and equipment financed by leases giving rights to use the leased assets as if they were owned by Syngenta are classified as finance leases and therefore are capitalized at the lower of fair value and the present value of minimum lease payments at the inception of the lease. Such leases are also embedded in contracts for goods or services provided by suppliers to Syngenta when the supplier can fulfil their obligations only by using a specific asset to supply Syngenta and the contract price is neither fixed per unit of output nor represents a market price. Finance lease assets and liabilities are recognized at the commencement of the lease, which is when the leased asset is ready for use and Syngenta has the right to use it. Finance lease assets are depreciated over the shorter of the remaining lease term and the estimated useful life of the leased asset. Leases that are not classified as finance leases are accounted for as operating leases. Operating lease payments are recognized as lease expense on a straight-line basis over the lease term irrespective of the timing of the payments. The lease term is the non-cancelable period according to the lease contract unless Syngenta has a right to extend the lease beyond the end of that period and believes it is reasonably certain to exercise that right.

Intangible assets other than goodwill

Intangible assets, other than goodwill, are recorded at cost less accumulated amortization and any impairment losses. Currently, all such intangible assets are assigned a finite estimated useful life. The cost of acquired intangible assets other than goodwill consists of the purchase price including transaction costs. The cost of internally generated intangible assets consists of direct internal and external design, development, and testing costs incurred to make the asset ready for use in the manner intended by management. Borrowing costs associated with internal software development projects are capitalized if the project is expected to take more than one year to complete. Capitalization ceases when the software is ready for its intended use.

Intangible assets are amortized starting from the date the asset is ready for use. In respect of product rights, this is when regulatory approval has been obtained. Asset lives are reviewed annually. The straight-line method of amortization is used except where another systematic basis better reflects the pattern of consumption of the economic benefits represented by the asset. Amortization is charged within the consolidated income statement to the function responsible for the asset, or to General and administrative.

Useful lives assigned to acquired product rights are based on the period over which Syngenta expects economic benefit from the product rights. Estimated lives assigned to most product rights upon acquisition are between 10 and 20 years and do not exceed 20 years for any asset.

Patents and trademarks are amortized over their estimated economic or legal life, whichever is shorter. Lives assigned are between 3 and 20 years for patents and between 5 and 30 years for trademarks.

Business combinations give Syngenta access to the distribution channels and customer relationships of the acquired business. These relationships normally continue to generate economic benefit to Syngenta following the acquisition. The useful lives of customer relationships are determined from management estimates of customer attrition rates. Estimated lives assigned are between 5 and 30 years.

Acquired in-process research and development (IPR&D), is valued at fair value at acquisition. It is assessed for impairment annually until it has been successfully developed and is available for use at which time it begins being amortized over its estimated useful life. Lives assigned are between 10 and 20 years.

Assets attributable to long-term supply agreements are amortized as part of cost of goods sold over the period of the supply agreements, which are between 5 and 12 years.

Purchased software licenses are amortized over their remaining license terms. Internally developed software is amortized from the date it is ready for use until the sooner of its expected replacement date or the date significant costs are expected to be incurred to upgrade it. Lives assigned are between 3 and 7 years.

Goodwill

Goodwill is the excess of the fair value of an acquired business over the fair value of its identifiable net assets at the acquisition date. Goodwill is recognized as an asset and presented within intangible assets. Goodwill is not amortized, but is tested annually for impairment and reduced by any impairment losses.

29. New IFRSs and accounting policies continued

Impairment

Property, plant and equipment, intangible assets and investments in associates and joint ventures are tested for impairment (“tested”) in accordance with IAS 36 unless classified as held-for-sale. Goodwill and intangible assets not yet ready for use are tested annually and are also reviewed at each interim and annual reporting date to determine whether conditions changed since the most recent review or annual test. Individual other non-current assets are reviewed at each reporting date to determine whether events or changes in conditions indicate that the carrying amount of each asset may not be recoverable. If any such indication exists, the asset is tested for impairment. Syngenta estimates an asset’s recoverable amount as the higher of the asset’s fair value less selling costs and value in use, which is the present value of the cash flows expected from the asset’s use and eventual disposal. An impairment loss is recorded in the consolidated income statement to the extent that the carrying amount of the tested asset exceeds its recoverable amount. Impairment losses are not reversed for goodwill, but are reversed for other assets if their recoverable amounts subsequently increase.

Non-current assets held-for-sale

Non-current assets and groups of assets are reclassified as held-for-sale when the assets are available for immediate sale in their present condition and a sale within one year is highly probable. Property, plant and equipment and intangible assets held-for-sale are remeasured at the lower of fair value less costs to sell or carrying amount at the date they meet the held-for-sale criteria at which time depreciation and amortization also ceases. Any resulting impairment loss is recognized in profit or loss. Fair value is measured based on bids received from potential buyers of the assets.

Provisions

A provision is recognized in the balance sheet when Syngenta has a legal or constructive obligation to a third party or parties as a result of a past event, the amount of which can be reliably estimated and it is probable that an outflow of economic benefits will be required to settle the obligation. The amount recognized as a provision is the best estimate of the expenditure required to settle the obligation at the balance sheet date. Syngenta self-insures or uses a combination of insurance and self-insurance for certain risks. Provisions for these risks are estimated in part by considering historical claims experience and other actuarial assumptions and, where necessary, counterparty risk.

Environmental provisions

Provisions for remediation costs are made when there is a present obligation, it is probable that expenditures for remediation work will be required within ten years (or a longer period if specified by a legal obligation) and the cost can be estimated within a reasonable range of possible outcomes. The costs are based on currently available facts: technology expected to be available at the time of the clean up; laws and regulations presently or virtually certain to be enacted; and prior experience in remediation of contaminated sites.

Environmental liabilities are recorded at the estimated amount at which the liability could be settled at the balance sheet date, and are discounted if the impact is material and if cost estimates and timing are considered reasonably certain.

Syngenta’s restructuring programs have involved closure of several sites to date. Remediation liabilities recognized when site closures are announced are accounted for as restructuring provisions.

Legal and product liability settlements

For claims for which, according to Syngenta’s assessment, it is not probable that a liability exists or that there will be a future cash outflow or other sacrifice of economic benefits, Syngenta provides for the costs of defense only. For claims where an outcome unfavorable to Syngenta is assessed as more likely than not, provision is made for the estimated amount of damages and settlement, including directly attributable legal costs. No provision is made where the legal procedures are at too early a stage to estimate the outcome with any reliability.

Restructuring provisions and costs

Restructuring costs are accrued (charged to provisions) when Syngenta has approved a detailed and formal restructuring plan and the restructuring has either commenced or been announced publicly and they qualify for recognition in accordance with IAS 37. Provisions for severance payments and related employment termination costs that do not depend on future service, are made in full when employees are given details of the restructuring plan and the termination benefits that will apply to individual employees should their contracts be terminated. Retention and other payments that depend on future service are recognized over the required service period. Restructuring costs relating to ongoing activities, such as relocation, training and information systems, do not qualify for provisioning under IAS 37 and are expensed when incurred.

Post-employment benefits

For defined benefit plans, plan assets are measured at fair value. The plans’ holdings in publicly quoted investments are valued at closing prices at the balance sheet date. The plans’ holdings in pooled investment vehicles (PIVs) that are not publicly quoted are valued at the respective investment managers’ current estimate of fair value, on a basis consistent with each PIV’s most recent audited financial statements. Derivative contracts entered into directly by the pension plans are included within plan assets. Exchange traded derivatives are valued at quoted balance sheet date bid prices for contracts which are assets, or offer prices for contracts which are liabilities, at the balance sheet date. Fair values of over the counter derivatives are measured using independent third party pricing services. The defined benefit obligations are measured at the present value of future benefit payments attributable to employee service rendered up to the balance sheet date, according to the benefit formula set out in the relevant pension plan rules and employment terms at the balance sheet date. Where a surplus of plan assets over the benefit obligation exists at the balance sheet date or would arise upon payment of the minimum funding commitment applicable to the pension plan, Syngenta evaluates the extent to which the surplus is realizable over time through refund rights and reductions in the present value of its future contributions to the plan. To the extent that the surplus is not realizable, the net defined benefit asset is reduced and, where applicable, an additional liability for minimum funding contributions is recognized. Benefit expense charged to profit or loss comprises current service cost, which is the cost to Syngenta of the increase in benefits earned from employee service in the period, gains and losses arising from amendments to and settlements of benefits that occurred during the period, and interest on the net defined benefit asset or liability, which is the change in the present value of that asset or liability arising from the passage of time during the period, measured using the rate used to discount the defined benefit obligation at the previous period end. The benefit obligation and cost are attributed to periods using the projected unit credit actuarial method and are measured using long-term assumptions about expected future length of employee service, increases in pay and pensions, longevity, and for healthcare plans, medical costs. Assumptions are reviewed annually. Gains and losses arising from variances between assumptions and actual outcomes, and from changes to assumptions, are recognized in OCI in the period in which they arise.

29. New IFRSs and accounting policies continued

Contributions to defined contribution pension plans are recognized as an expense in profit or loss when they are due.

Share based payments

The fair value of equity-settled share and share option awards to employees is recognized as compensation expense, and as a corresponding increase in equity, over the period in which the shares or options vest. An award is granted when it has been approved by the Compensation Committee of Syngenta AG's Board of Directors and its terms have been communicated to share plan members. The fair value of grants of Syngenta AG ordinary shares is measured at market value on the grant date, less any cash amount payable by the employee. The fair value of grants of share awards and unvested shares that do not carry dividend rights until vesting is reduced by the present value of the expected dividends to which the holder will not be entitled. No discount is applied to grant date market value to reflect vesting conditions. As described in Note 23, vesting of certain share option awards is conditional on Syngenta's total share return over a three year period relative to a defined peer group of other companies. For these awards, compensation expense is calculated using a fair value per option and number of shares expected to vest that are derived using the Monte Carlo method at the time of grant and are not subsequently revised. The fair value of all other grants of options over Syngenta AG ordinary shares, where vesting is conditional only on completing a required period of service, is measured using the Black-Scholes-Merton formula. For all awards that do not have a performance condition related to the market price of Syngenta shares, compensation expense is measured using Syngenta's best estimate of the shares and options expected to vest, taking into account expected fulfilment of service requirements and, where applicable, performance conditions unrelated to Syngenta's share price. This estimate is adjusted subsequently so that final expense is based on the number of shares and options that actually vest. Except for the effect of adjusting the number of vesting shares and options in this way, compensation expense is recognised on a straight-line basis over the award's vesting period. Grants with a cash or equity alternative for plan members are accounted for as liabilities until the members' choice is known. The incremental fair value of members' equity option for these grants is zero. A member's choice to receive equity instruments is accounted for by transferring the fair value of the liability to shareholders' equity when the choice is made. For certain equity-settled share plans, Syngenta has withholding obligations in respect of plan members' personal income tax liabilities on vesting or exercise of awards. These plans are accounted for as fully equity-settled.

The fair value of equity settled and cash settled share grants awarded to customers in cash rebate sacrifice arrangements is recognized as a reduction in sales in the same way as the cash rebate.

Dividends and capital distributions

Dividends payable to shareholders of Syngenta AG are recorded as liabilities and as a reduction in shareholders' equity in the period in which they are approved by the shareholders of Syngenta AG.

Treasury shares

Share capital includes the par value of treasury shares held by Syngenta that have not been cancelled. Treasury shares are shown as a separate component of shareholders' equity and stated at the amount paid to acquire them. Differences between this amount and the amount received upon their disposal are recorded as a movement in consolidated shareholders' equity.

30. Subsequent events

In January 2016, the terms of Syngenta's \$1.5 billion committed, revolving, multi-currency syndicated credit facility were amended to enable Syngenta to establish an additional \$1 billion committed, syndicated facility. This additional facility was established in January 2016 and expires in 2019.

In the second half of 2015 Syngenta announced the intended divestment of its Vegetables and Flowers seeds businesses. In October the company launched a share buyback program, under which 231,500 shares were repurchased for a total amount of \$79 million. On February 2, 2016, following internal review the Board of Directors decided not to pursue the divestments and the share buyback will consequently be discontinued.

On February 2, 2016, the Board of Directors decided to support a proposal by China National Chemical Corporation (ChemChina) to acquire 100 percent of the ordinary shares of Syngenta AG through a tender offer to shareholders at an offer price of \$465 per share, to be paid in cash. A separate, equivalent offer will be made to holders of Syngenta American Depositary shares (ADSs). This offer would become binding on announcement by ChemChina of the offer terms, and would become unconditional upon fulfilment of regulatory approval by all competent merger control and other authorities and acceptance by shareholders owning 67 percent of Syngenta AG issued shares. ChemChina is not permitted to commence the offer until certain regulatory approvals have been obtained. Under the terms of the proposal, if the offer becomes unconditional, Syngenta AG will pay a special dividend of CHF 5.00 per share immediately before the first settlement of the offer. The offer price will not be adjusted for the special dividend, nor for the dividend of CHF 11.00 per share which the Board of Directors will propose to the AGM on April 26, 2016. On acceptance of the tender offer by shareholders owning 90 percent of Syngenta AG issued shares, it is intended that a squeeze-out procedure would be applied to shares that have not been tendered. Under the transaction agreement between Syngenta and ChemChina, in certain circumstances, if the Board of Directors were to withdraw its support for the offer and as a result the offer is not successful or does not become unconditional, Syngenta will pay ChemChina \$1.5 billion. ChemChina will pay Syngenta \$3 billion if, despite all conditions of the offer having been satisfied or being still capable of being satisfied, the offer does not become unconditional or is terminated as a result of the failure to obtain certain regulatory approvals.

30. Subsequent events continued

Approval of the Consolidated Financial Statements

These consolidated financial statements were approved by the Board of Directors on February 2, 2016.

