

Annual Review 2012
**Bringing plant
potential to life**



Bringing plant potential to life

Syngenta is one of the world's leading companies with more than 27,000 employees in some 90 countries dedicated to our purpose: Bringing plant potential to life. Through our world-class science, we aim to deliver integrated solutions that will transform the way crops are grown around the globe, and to extend our contribution beyond yield.

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About Syngenta

Crop focus

We are using our deep knowledge of agriculture to develop fully integrated offers on a global crop basis, combining our innovation in genetic and chemical solutions.



Crop sales ¹ \$m	2012
■ Corn	3,612
■ Soybean	2,341
■ Cereals	1,599
■ Rice	590
■ Vegetables	1,670
■ Sugar cane	259
■ Diverse field crops	1,299
■ Specialty crops	2,051
■ Lawn and Garden	757

Read more about "Crops" on [pages 22–35](#)

Global reach

Our teams around the world use their local knowledge and understanding – together with the breadth of expertise from across the business – to tailor solutions that create value for growers.



Regional sales ² \$m	2012
■ Europe, Africa, Middle East	3,974
■ North America	3,931
■ Latin America	3,713
■ Asia Pacific	1,827

Read more about our "Regional performance" on [pages 20–21](#)

¹ Crop sales are based on Syngenta estimates

² Excluding Lawn and Garden

Business highlights 2012

Quadruple stack corn approval in Argentina

In March, the Secretary of Agriculture in Argentina approved Syngenta's MIR604 trait and quadruple corn stack AGRISURE VIPTERA® 4 for cultivation. The combination of corn rootworm control with the AGRISURE VIPTERA® trait against *Lepidopteran* pests sets new standards for insect control.

Contributing to African agriculture

In conjunction with the G8 Summit in May, we announced a commitment to invest more than \$500 million to build a \$1 billion business in Africa over the next 10 years. This commitment reflects the company's belief that Africa has the resources not only to feed its growing population, but also to become a major world food exporter.

Investing in new facilities

We announced in July a \$50 million investment to build a new processing plant for corn and sunflower seeds in Argentina, confirming our long-term commitment to Argentine agriculture. We also announced our intention to invest up to \$85 million in the construction of a hybrid seed and crop protection production facility in Russia.

Global commercial agreements with Novozymes

Syngenta and Novozymes entered into two exclusive global agreements to commercialize Novozymes' Taegro® and JumpStart® technologies. Taegro®, a fermented biological fungicide based on a naturally occurring bacterium, offers broad spectrum disease control at low application rates. JumpStart® is a seed-applied biological that increases phosphate solubility in the soil, to be marketed in combination with Syngenta's seed care portfolio.

Acquiring new technologies

In September we agreed to acquire US biotechnology company Pasteuria Bioscience Inc. We will be introducing their products to complement our existing chemical nematicide range and to support integrated solutions across crops. In November we launched a public takeover bid for Devgen, a global leader in hybrid rice and RNAi technology. By January 18, 2013, 98.32 percent of total shares had been tendered, giving Syngenta full control of the company.

Next generation fungicide approval

In November, we received European Union (EU) approval for isopyrazam, the first active ingredient from our strong pipeline of next-generation fungicides. It is active against a wide spectrum of damaging fungal diseases, and we intend to register isopyrazam products in major EU markets for use on cereals as well as oilseed rape, vegetables and pome fruits.

Stepping up integrated offers in North America

The increasing incidence of weed and insect resistance in the USA led to strong demand for our resistance management programs. Strong sales growth in the region also reflected the success of our water optimization offers, which include the new trait AGRISURE ARTESIAN® and solutions combining crop protection and irrigation in ways that increase yield and convenience for the grower.

Syngenta's international photography award

The Syngenta Photography Award is a new international competition that aims to stimulate dialogue around key global challenges. Open to professional and amateur photographers, the Award's inaugural theme explores the relationship and tensions between rural and urban environments.

Group performance

Group sales¹

\$14.2bn +10% (CER)

2010	11.64
2011	13.27
2012	14.20

Cash flow return on investment²

15%

2010	13%
2011	14%
2012	15%

Crop Protection sales^{1,3}

\$10.3bn +9% (CER)

2010	8.45
2011	9.68
2012	10.32

Seeds sales¹

\$3.2bn +16% (CER)

2010	2.48
2011	2.85
2012	3.24

Earnings per share⁴

\$22.30 +15%

2010	16.44
2011	19.36
2012	22.30

Dividend per share⁵

CHF9.50 +19%

2010	7.00
2011	8.00
2012	9.50

CO₂e emissions intensity

0.59 CO₂e kg/\$EBIT

2010	0.66
2011	0.61
2012	0.59

Illness and injury rate⁶

0.39

2010	0.41
2011	0.44
2012	0.39

Water usage intensity

13.2 Liters/\$EBIT

2010	14.6
2011	13.4
2012	13.2

Seed supply farms in the FLA program⁷ **17,625**

2010	11,886
2011	16,880
2012	17,625

 Read more "Financial information" on [pages 52–59](#)

 Read more about "Corporate Responsibility Performance" on [pages 60–64](#)

¹ Growth at constant exchange rates (CER)

² For a definition of cash flow return on investment, see page 58

³ Including sales of Crop Protection products to Seeds

⁴ Fully diluted excluding restructuring and impairment

⁵ 2012 dividend is subject to shareholder approval at the Annual General Meeting on April 23, 2013

⁶ Recordable injury and illness rate (IIR) per 200,000 hours according to US OSHA definition.

⁷ Syngenta is a participating company in the Fair Labor Association www.fairlabor.org

Chairman's letter

The challenges of the future are significant but Syngenta is uniquely placed to help growers around the world prosper and, in so doing, continue to prosper itself.



1.

1. Visiting the rice field of Pham Minh Quyen (right) in Vietnam to see the Syngenta solutions in action.

2. Learning about the germination and vigor of corn seeds at a Syngenta seeds processing plant in the Philippines.



2.

It is natural, since I am leaving the Board at this year's annual meeting, to look back over the profound changes that have taken place over my period of office, since 2000 as a non-executive Director and then, since 2005, as Chairman of the Board. At its founding in 2000, Syngenta was an Anglo-Swiss provider of agricultural chemicals, operating overwhelmingly in the OECD countries. Growth prospects appeared, to most outside observers including the company's former parents, to be rather limited. Now, as 2013 begins, Syngenta is that rare bird, a genuinely global business, and is becoming the leading provider of an unrivalled spectrum of technology solutions to growers right across the world. Expectations for the next decade are high, since the company's set of available opportunities is unusually rich.

What has been at the root of this transformation? We have had good fortune, but we have to a large extent made our own luck. Lucky in that the adoption of agricultural technology in developing markets – Latin America most notably, but also much of Asia and the former Soviet Union – has been unexpectedly rapid and comprehensive. We have made our own luck by seizing the opportunity this offered, powered by an unusual corporate culture, collaborative, demanding and

increasingly centered on growers and their needs. The way Syngenta people do business across the world is a central aspect of the company's success to date.

In the 1990s, food supplies for those fortunate enough to have access to markets were abundant and seemed likely to remain so. Since then, a continuously rising population, accelerating urbanization and pressure on natural resources have led to a dwindling of this apparent abundance. Moreover, with more competition for available supplies of food, prices of agricultural commodities are now much higher. Growers are accordingly keen to invest in yield enhancement for their crops.

Unfortunately, urban consumers in rich nations drew some erroneous conclusions from the period of abundance. Many came to believe that agricultural technologies such as pesticides and commercial seeds were both undesirable and unnecessary. This led them not only to oppose the spread of technology, but also to argue in favor of extensive forms of agriculture, which – in a period of rising population allied to rising prosperity – calls for a great increase in the area of cultivated land. At the margin, this increase can only be supplied through deforestation and a reduction in natural habitats, the very solution which all pretend to deplore.

3.
With Michael Mack,
presenting the Syngenta
Purpose Award to Erika
Balzarelli and Kuldeep Kaul
for their team's development
of GROMORE™ in rice.



3.

At the heart of this urban way of thinking lies the curious belief – in part encouraged by the food industry – that agriculture is, or should be, a “natural” activity. Good farmers, of course, work with natural cycles and have deep respect for biodiversity. But in fact agriculture, together with medicine, is in many ways an anti-natural activity, and has been so since the first Chaldean farmer cleared the ground to plant her spelt. Natural forces work to stifle crops as surely as, in the absence of medicines, they shorten human life. Only by using technology to limit the encroachments of nature can we maximize the areas not needed for cultivation and leave them in a natural state.

The role that Syngenta can play in helping the world address these vital issues far exceeds what we could have imagined a decade ago. For all those who work in the company, this is at once an ambition, and inspiration, and a responsibility.

I am retiring together with three Board colleagues – Peggy Bruzelius, Peter Thompson and Felix Weber – who, like me, have been involved in Syngenta from, or almost from, its beginnings as an independent company. Gratitude is owed to all three of them for their many and varied services

to the company, in particular to Mrs. Bruzelius for her tireless work as chair of the Audit Committee over more than 12 years, and to Dr. Weber for so judiciously chairing the Compensation Committee, a job that has become, on all boards, more difficult over time.

My successor, Michel Demaré, inherits a company in excellent financial and strategic health with a profound purpose, a strong culture and more than 27,000 passionate and dedicated employees. The challenges of the future are significant but Syngenta is uniquely placed to help growers around the world prosper and, in so doing, continue to prosper itself.

Martin Taylor
Chairman

Chief Executive Officer's letter

Agriculture is moving up the global growth agenda, and that is driving both our confidence and our ambition for the future.



1.



2.

1.
Speaking at the G8 Symposium "Beyond L'Aquila: Advancing food security" at the G8 Summit, Washington DC, USA

2.
With Babu Suresh, TEGRA® Head, India, discussing rice with farmers during a crop update event in Chennai, India

One of the prevailing global themes of 2012 was the need to stimulate economic growth. Agriculture played a very limited role in that debate, as in most of the developed world its share of GDP is small – less than 2 percent for both the USA and the EU27 countries. However, for anyone concerned with emerging market livelihoods today, or with global food security tomorrow, the sustainable development of agriculture is of paramount importance.

Twice in the last five years, spiraling crop prices have reminded us of this fact. In 2008, commodity prices rose as the world woke up to the consequences of insufficient production and investment in farming in a context of long-term demand growth. In 2012, the cause was more abrupt, with significant production shortfalls due to weather. Higher crop prices again affected many emerging market households – for whom spending on food can absorb more than half their income – as well as livestock producers who were forced into culling by rising feed costs. For farmers, generally seen as benefiting when commodities rise, the volatility of the last five years adds a layer of complexity to how they run their business.

Syngenta's integrated strategy, launched in 2011, aims to help growers around the world to manage volatility and complexity while increasing crop yield and quality. We do so through the breadth of our technology and our proximity to farms of all sizes. Early success from our investment in eight strategic crops has enabled us to raise the targeted sales for these crops to \$25 billion in 2020. This represents a significantly higher

long-term growth rate than we could have expected to achieve with our former strategy. It demonstrates the added value we can realize through bringing together our portfolio in ways that are adapted to the needs of individual growers worldwide.

2012 set the tone for future growth with sales up 10 percent at constant exchange rates. I am pleased to report that we achieved a further increase in profitability despite significant currency and raw material impacts. Earnings per share, excluding restructuring and impairment, rose by 15 percent enabling us to propose a 19 percent increase in the dividend. I should like to thank all our employees for their contribution towards achieving these results and for their energy and enthusiasm in driving our strategy forward.

Examples of the distinctive offers driving our performance include solutions to optimize water use. Several of the offers that have been under development for some years reached the market in 2012 – just when drought became a headline topic. Our AGRISURE ARTESIAN® corn trait demonstrated a yield benefit of 17 percent even in the driest conditions. Crop protection also can strengthen a plant's resistance to heat and drought stress, and we have launched integrated systems for the precision application of both chemicals and water. Our complete corn offer also enables US growers to combat glyphosate-resistant weeds and to broaden insect management programs beyond traits. Outside the USA, we have achieved new trait registrations in Latin America and are expanding sales of tropical germplasm in Asia Pacific.

3.

At the 2012 IUCN World Conservation Congress, Jeju, South Korea.

From left to right: Mohammed Valli Moosa (former President of IUCN); Michael Mack (CEO Syngenta); Tae-Pyong Jang (former Minister for Food Agriculture, Forestry & Fisheries of the Republic of Korea);

Solange Marquez Espinoza (Journalist and Political Analyst); Julia Marton-Lefevre (Director General of IUCN); M.S. Swaminathan (Member of Parliament Rajya Sabha India); Camilla Toulmin (Director, International Institute for Environment and Development).



3.

For many smallholder farmers, part of the value we offer lies in the education and agronomic services we provide in the field. Our GROMORE™ protocols in rice for example are a simple, phased approach to crop protection that can deliver yield advantages of up to 30 percent. They form part of TEGRA® – our integrated rice offer described in more detail on page 28 – for which we are now expanding the scope to serve both non-mechanized and mechanized farmers.

Over the last five years, Syngenta has generated sales increases at a compound average growth rate of 9 percent, with a minimal contribution from acquisitions. In 2012, however, we made a number of significant acquisitions that enhance our technology platforms and represent significant future sales potential. These included Devgen, which brings an exceptional portfolio of hybrid rice seeds and a promising pipeline, complementing our leading crop protection portfolio and expanding the scope of our integrated offers. The acquisition of Pasteuria Biosciences, Inc. will reinforce our proven ability to incorporate biologicals into our crop protection offer, as will two agreements signed with Novozymes. We are proud to welcome employees from the acquired companies to Syngenta, where their expertise will be important in the development of our combined businesses.

In May, I was privileged to join leaders from the G8 and several African countries at the Camp David summit, to participate in discussions on the potential for transforming Africa through agricultural

development. Such transformations have occurred in the past but they depend on international investment and public-private partnership. Syngenta has played, and will continue to play, a role in the development of agriculture in virtually every emerging country. We have pledged to do the same in Africa, investing \$500 million over 10 years with the aim of building a \$1 billion business. By sharing knowledge, tools, technologies and services, we want to enable smallholder farmers to move from subsistence to commercial agriculture, while generating income that will enrich whole societies. Agriculture is moving up the global growth agenda, and that is driving both our confidence and our ambition for the future.

The future will continue to be defined by the quality of our people and our leaders. It is therefore fitting to close with a tribute to Sandro Aruffo, Head of Research and Development, who died in January 2013. Sandro was a brilliant and dedicated man who played a pivotal role in helping to deliver our integrated strategy. We remember his contribution with gratitude, and mourn the loss of a valued colleague and friend.

Michael Mack
Chief Executive Officer

The 21st century's greatest challenge: how to feed more people sustainably

Population pressures

**80 million more
mouths to feed
every year**

By 2050, the world's population will have increased by almost a third. We will have 2 billion more mouths to feed.



10,000 years

We need to produce more food in the next 50 years than in the past 10,000.¹

5 people

In 1950, a hectare could feed two people. By 2030 it will have to feed five.²

Land pressures

**We lose a soccer
field of farmland
every second**

Soil erosion and urbanization are reducing available farmland. Every second, we lose an area about the size of a football field – while adding two more people to the world's population. We have to produce more food from less land.





Resource pressures

One person consumes 2,000 liters of water a day

Farming uses 70 percent of the world's fresh water withdrawal: growing food for one person takes about 2,000 liters of water a day. We have to produce more food with less water.

3 years

Stocks of major crops have now fallen for the third year in a row, and demand continued to grow by 1.4 percent each year.³

Consumer pressures

'Enough' is a moving target

While almost a billion people today are undernourished, another billion are overweight. As affluence increases, consumers demand greater variety, quality and quantity of food. In growth economies such as China, they are switching from crop-based to meat-based diets that are significantly more resource-hungry.



Labor pressures

Farmers are a shrinking population

The lure of the city continues to deplete rural populations. More than half of humanity now lives in towns and cities, and the rate of urbanization is set to grow by almost 2 percent a year between 2010 and 2015. In many rural areas, labor scarcity is now driving-up farm costs.



230 million

Between 2000 and 2050, global meat demand will double – an increase of 230 million metric tons.⁴

3.4 billion

Today's rural population is 3.4 billion. It is not expected to increase.⁵

1 Guardian report on UN Food Conference, Iceland, 2007
2 FAOSTAT
3 WASDE report, December 11, 2012
4 USDA
5 FAOSTAT

Our contribution

A company that successfully addresses some of the pressures of an increasing population will be well placed to grow and create value for investors and society.

Addressing global challenges

By 2050, we must provide 9 billion people with enough to eat: food that is nutritious, affordable and accessible. To produce the necessary quality and quantity of food, while protecting the natural resources on which we depend, we must learn to grow more with less.

The task for growers is complicated by societal expectations. Consumers seek greater variety and quality. To satisfy these demands, wholesalers and retailers set ever more demanding standards for food such as improved flavor, longer shelf life and better uniformity. And regulators impose increasingly stringent requirements for the use of chemicals and other technologies to ensure the safety of food.

A company that successfully addresses some of the pressures of an increasing population will be well placed to grow and create value for investors and society. At Syngenta, we believe passionately that the challenges can be overcome. And we intend to play a leading part – contributing to global food security by providing better solutions, enabling resource efficiency and increasing growers' productivity and profitability.

More productive and sustainable

The world's farmers need to increase yield per hectare sustainably, without using more water or other natural resources, and using chemical inputs as efficiently as possible.

Great strides have already been made. Between 1987 and 2007, corn productivity increased by 41 percent in the USA. These increases in productivity occurred while reducing environmental stress. For example, soil runoff is a primary cause of water pollution. Since 1987, soil loss in corn farming in the USA has declined by 69 percent per bushel. Irrigation in corn farming has decreased 37 percent.¹ Similar gains have been seen in other major crops. From an environmental point of view, higher yield means more environmentally efficient use of water, land and other resources – in short, a smaller environmental footprint.

¹ Keystone Center Sustainability Initiative



The seedling start-up

"I am so excited about this opportunity. It's really helping me to grow my business for the long term."

Mercy Kendi (left)
Grower
with Humphrey Kiruaye,
Syngenta
Meru, Kenya

More online
www.syngenta.com/ar2012

Syngenta will continue to enhance yield and resource efficiency by advancing technology – and particularly by developing solutions that integrate biological and chemical approaches.

Closing the yield gap

However, the yield gaps between continents – and even countries in the same continent – remain wide. There is great potential to increase rice productivity in developing African and Asian countries, but growers need access to the best seeds, crop protection and training to make the needed leap in productivity.

Though corn yields in many Asian countries are far below that of the USA, some farms in China's northeastern grain belt used new hybrid seeds in 2012 and matched US Midwest yields. They achieved nearly twice the Chinese average.¹

Providing knowledge and support

One important key to closing the yield gap is inclusive business models for smallholder farmers. Food security will depend on the success of the world's 450 million farms of less than two hectares. In Africa and Asia, more than 80 percent of farmers are smallholders. Today, they produce 25 percent of global output and feed some 2 billion people. They have the potential to double their output by 2050, but cannot do this through better products alone.

We are working to give them access to the agronomy knowledge, finance and insurance they need – and better access to market. For example, in Central America our FRIJOLAN® and FRIJOLNICA® programs provide farmers with credit facilities as well as training. In Mexico, our LUPPA® program has trained half a million corn smallholders in agronomy and management practices. This helped to increase their productivity on average by 50 percent, cut water use by up to 20 percent and reduced soil erosion.

¹ Reuters, November 12, 2012, "China's corn revolution promises great leap forward in yields"

Better use of resources

Land and water are two of the largest limiting factors in food production. Population growth, urbanization, deforestation, soil erosion and demand for water are increasing the pressure on the agricultural ecosystem at an alarming rate.

Over the last 60 years, modern agricultural technology has helped growers to double food production on the same hectare of land. Crop losses to insects, weeds and diseases in the field or post-harvest would be 40 percent¹ higher without crop protection. Such losses are effectively a waste of the resources needed to grow the crop.

Growers are always looking for ways to work more productively and sustainably with the resources available. That means more food with less land, less water, less labor, less energy and less carbon released into the atmosphere.

At Syngenta, we are developing better seeds, chemistry and integrated solutions that help farmers grow more food while ensuring that natural resources can be managed sustainably.

More modern chemistry

Modern pesticides are far more efficient than the pesticides that were used just a few decades ago. As chemistry and application technology have developed, we have been able to protect crops

from attacks by insects and fungal diseases, and competition from weeds that destroy or reduce the harvests, while using much lower doses with higher precision application.

For example, copper oxide has been used for over a hundred years to fight fungus infections in crops. It is still the most commonly used fungicide in organic production, with a typical application rate of 1.5–6 kilograms per hectare a year.² Copper is not degraded in soil, creating concern over long-term effects on soil biodiversity. Modern fungicides, on the other hand, which offer the same or better protection, are typically applied in the range of grams per hectare a year and are tested to ensure degradability in soils.

Technology leads to land preservation

Converting more land into agricultural production threatens wilderness and precious habitats. We believe it is better to use existing farmland more intensively, combining practices and products that will increase yield.

A study from Stanford University found that the adoption of modern agricultural practices, starting in the 1960s, has saved a portion of land larger than Russia – that's about the size of three Amazon rain forests – and cut emissions by the equivalent of almost 600 gigatons of carbon dioxide, roughly one-third of the total emitted since the start of the Industrial Revolution.³

¹ Oerke E.-C., Dehne H.-W.; Crop Protection, Vol. 23, p. 275-285; 2004

² Forschungsinstitut für biologischen Landbau, Betriebsmittelliste 2012

³ J. A. Burney et al. Proc. Natl Acad. Sci.; Vol. 107, Issue 26, p. 12052-12057; June 2010

Protecting Colombia's natural resources

"The constant support and resources Ecoaguas provides, enable us to make a real difference in the communities we work with."

Lola Maria Arias (left)
Director of Asofrayle
(Asociación de Usuarios del Rio Frayle)
with Alexander Joya,
Ecoaguas Project Manager
Municipality of Florida, Valle del Cauca, Colombia

More online
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Making the most of water

Agriculture accounts for some 70 percent¹ of global fresh water withdrawal, but up to 40 percent of this water is wasted by inefficient practices such as field flooding. To get the highest possible yield out of every drop, we are developing innovative water-efficient technologies, drought-tolerant seeds such as our revolutionary ARTESIAN™ corn hybrid, crop protection products, and optimized irrigation systems (see page 23).

In Tanzania, we have developed environmentally sustainable models for rice and corn smallholders that lift yield by 80–120 percent with no increase in water use. And in Bangladesh, a simple water monitoring system, PaniPipe, has cut rice farmers' water use by 30 percent while increasing yield. Developed by Syngenta with the International Rice Research Institute, it is raising their return on investment by a third and taking many farms from net losses to profits.

The importance of soil fertility

Fertile soil is the foundation of a sustainable agricultural system. But poor farming practices expose soil to erosion by wind and rain, rendering millions of hectares infertile each year. Already, some 40 percent of the world's farmland is seriously degraded, and an area large enough to feed Europe is too depleted to produce food.²

Much of this soil is lost as a result of traditional tillage or plowing for weed control. By breaking up and turning the soil, tillage leaves it more vulnerable to erosion, and soil is more easily washed off the fields by heavy rain. We need to help farmers increase soil fertility and improve the productivity on their land in sustainable ways. That means crop rotations, restoring degraded land, planting vegetation around fields to prevent erosion, and techniques to avoid unnecessary tilling.²

Training to preserve soil

Practices that conserve soil – such as the appropriate use of herbicides to reduce tillage – are essential: nature takes 500 years to replace 25 millimeters of lost soil.³ Our work to promote conservation tillage is always adapted to local needs. For example, a program in Colombia that trains around 1,400 potato farmers each year, has increased productivity by 25–30 percent while reducing soil loss by 67 percent.

Syngenta is developing and training growers in best management practices for land and water use that minimize soil erosion and sustain crop productivity. By protecting the valuable topsoil, farmers can benefit from fertile soils that continue to be productive.

For example, we initiated ProTerra, a practical research project in perennial Mediterranean crops. By planting cover crops between rows of vines and olive trees on pilot farm plots in France, Portugal and Spain, soil permeability was improved, and erosion was reduced by up to 90 percent.

We have also developed a practical tool that simplifies the diagnosis of runoff and erosion risks in different scenarios, and provides growers with a set of recommended practices to address each scenario on their farm.

The case for biodiversity

Farming depends on biodiversity. Diversity of genetic material is the key to adapting crops to changing conditions – and climate change is accelerating the need for adaptation. Biodiversity is also crucial for crop pollination, healthy soils and water purification.

Cultivating more wilderness for human consumption threatens biodiversity, so it is crucial that farmers become more productive and manage their land to protect and improve biodiversity on the farm and around the field.

Increasing pollinator habitats

Farms need the pollination provided by bees and other insects – more than one-third of the world's agricultural crops depend on pollination.⁴ But populations of bees and other pollinating insects have been falling in many countries. Since 2001, OPERATION POLLINATOR™ has been creating pollinator habitats by planting field margins with local wildflower seed mixes across Europe and the USA. Farms are reporting up to 300 times more bees as a result.

We are also integrating biodiversity, water and soil conservation solutions into complete sustainability packages for farmers. These allow them to increase productivity while reducing their environmental impacts and meeting the value chain's increasingly stringent sustainability requirements. In 2012, we shared these case studies at the International Union for the Conservation of Nature Congress in Jeju, South Korea, where Syngenta participated as part of the World Business Council for Sustainable Development delegation.

¹ FAO AQUASTAT, 2005, World Resource and Earthscan "Water for food, water for life" Institute

² United Nations Environment Programme

³ Pimentel D, Pimentel M; American Journal of Clinical Nutrition; Vol. 78, Issue 3, p. 660S-663S; September 2003

⁴ FAO: www.fao.org/biodiversity/components/pollinators/en/



Earning farmers' trust

"Being able to advise customers in the safe use of Syngenta products and help them to avoid counterfeits has not only improved my business, but also the sharing of best practices within the farming communities."

Abdul Momin (right)
Krishitey Syngenta retailer
with Mohammad Sabedali
Pramanik, farmer
Bogra, Bangladesh

More online
www.syngenta.com/ar2012

Better access to biodiversity

We recognize that we cannot do everything on our own and are constantly seeking new ways to foster collaboration. For example, we recently partnered with the Global Crop Diversity Trust to digitize over 70 handwritten catalogues and field journals of cereal and legume crops held at a research institute in St. Petersburg, Russia. Making this information searchable and readily available to plant breeders around the world helps them develop varieties better adapted to climate change and other threats.

In the same spirit, we have launched a new online e-licensing system that gives plant breeders worldwide quick and easy access to our patented native traits and enabling technologies, so that they can be used in more varieties and combinations. This will help companies large and small to develop the diverse crop varieties farmers need without spending time and resources on negotiation and contracts. Our new system provides straightforward access to our traits under fair, transparent and standard terms.

Ensuring agriculture is safe

Our products are designed to be used safely in nature. That is why each pesticide undergoes rigorous environmental and human safety assessments before being eligible for registration. It takes 8–10 years to bring a product from discovery to market, at a cost of over \$200 million, of which around a third is spent on safety assessments.

Modern pesticides and technology make farm work less arduous as well as more productive: hand weeding a one-hectare farm takes 200 hours of backbreaking labor.

Stewarding our products

Throughout the development of every chemical product, we work to minimize its risk profile. And, once it is accepted for registration and sale, we work with vendors and growers to help them handle, store and use it safely. By training farmers on the safe handling and secure storage of pesticides, we aim to raise their awareness and encourage them to treat all chemicals with proper care.

Pesticides are distributed and sold through chains of wholesalers and retailers. The number and size of these vendors and the length of the value chain varies greatly from country to country. Because of this complexity, we reach out to as many growers as possible through a diversity of channels and partnerships with retailers and local organizations: no single organization alone can reach the whole farming community in every country – it has to be a joint effort. In the past three years, we have trained more than 9 million growers in the safe use and storage of chemicals. In China, we have partnered with the Ministry of Agriculture in a scheme that has trained over 200 million farmers on safe use of crop protection since 2000.

Better and safer programs

We are focused on developing sustainable technologies to increase productivity safely and efficiently. Our solutions raise yield and reduce crop losses, but many go further. Programs such as TEGRA® and PLENE® also help to improve working conditions by reducing backbreaking planting in rice, and replacing potentially hazardous manual labor in sugar cane with mechanized planting.

See page 42 for more information on the safe use of products and our stewardship activities.

Making agriculture more viable

More than 2.5 billion people depend on agriculture for their livelihoods. Improving the income of these people would be a great leap towards advancing the UN Millennium Development Goal of eradicating hunger and poverty.¹ As a company, we can help the farming community to prosper by providing tools that make agriculture more productive, efficient and profitable.

For many of the world's farmers, the financial risks are high and the returns are low. More than three-quarters of the world's poor live in rural areas,² and migration to the cities continues. Syngenta wants to help restore and maintain vibrant rural communities by providing technology that enables farmers to progress beyond subsistence agriculture.

Solutions to fit smallholders

As with any business, farmers need skills and resources to prosper. We have programs to educate them in new technology, help them finance higher-yielding products and enable them to reach markets more effectively. In Peru, a scheme to involve smallholders in the local value chain of supermarkets, hotels and restaurants has more than doubled participants' household incomes.

And in Brazil, over 1,400 farmers have sold more than 35 million kilograms of coffee through our NUCOFFEE® program, which lets them improve quality and productivity without upfront investment by bartering their coffee for products and services.

A bright future for Africa

Investment in small-scale farms can pay dramatic dividends. Vietnam has become a world force in rice exports. In 2012, we announced a commitment to invest over \$500 million in driving a similar revolution in Africa. We believe the continent has the potential not only to feed its own growing population, but also to become a major food exporter. Our target over the next 10 years is to reach over 5 million African farmers and lift productivity by 50 percent or more, while preserving the long-term potential of the land.

Syngenta Foundation for Sustainable Agriculture

The Syngenta Foundation (SFSA) improves smallholders' livelihoods in developing countries. It helps raise farmers' yields and improves their links to markets. SFSA works with many different partners and is a leading source of expertise on public-private partnerships (PPPs). In 2012, the Foundation launched Ag Partner XChange, a platform to facilitate agricultural PPPs.

Project milestones included the extension of the Kilimo Salama weather insurance program, which provides affordable weather information and pay-as-you-go insurance against drought and excess rain, from Kenya to Rwanda. In 2012, Kilimo Salama won the *Financial Times*/IFC award for Technology in Sustainable Finance. To mark its tenth anniversary, SFSA established a research fellowship for an African scholar at Basel University, Switzerland.

¹ World Bank: World Development Report 2008

² World Resources Institute

The seeds of better schooling

Disease-free seed can double yields of potato, a crucial crop for East Africa. The Syngenta Foundation is working with Kenyan and other partners to establish reliable and affordable supplies. Smallholders invest much of the resulting extra income in school fees.

More online
www.syngentafoundation.org



Delivering our strategy

In 2011, we began combining our crop protection and seeds businesses to focus more comprehensively on the challenges farmers face. This is transforming the way we work. It has enabled us to present a fully integrated offer to growers for each of our strategic crops. It is helping us to innovate by developing solutions that draw on our combined biological and chemical capability. And bringing better results in the field means that we will outperform for all our stakeholders.



Integrate

Purpose

Create integrated offers in the field supported by agronomic expertise and an understanding of the challenges growers face.

Achievements

- All 19 territories worldwide fully integrated, with commercial teams trained and building the momentum of a combined portfolio
- Resources allocated by crop on the basis of fully elaborated strategies and detailed pipeline analysis
- Support functions integrated into Syngenta Business Services

The integration of our commercial teams was completed ahead of schedule, with all 19 territories integrated by mid-2012. Our broad portfolio provides multiple opportunities to combine products in order to achieve better crop yield and quality. Growers look to our sales people for expert guidance, and as part of the integration process we have been cross-training crop protection and seeds specialists so that they have a fully rounded view both of their customers' challenges and of the potential solutions.

Integration of Research and Development (R&D) means approaching the problems to be solved from a grower's point of view – and anticipating the challenges he will face in the future. The combined chemical and biological expertise of our R&D teams is being augmented through new partnerships and collaborations, which incorporate adjacent technologies and bring new offers to market more quickly.

Two years before we started bringing our commercial operations together, we began building integrated support functions and platforms to underpin the new organization. Syngenta Business Services, comprising functions such as finance, human resources and information systems, has been crucial to a smooth transition. It established robust, standardized systems and processes, and introduced integrated reporting so that management could view the whole organization from a single perspective.

Efficient new systems have enabled significant cost savings, with scalable platforms to support the rapid growth that the strategy envisages.



19 territories

All 19 territories worldwide fully integrated, with commercial teams trained and building the momentum of a combined portfolio.

Innovate

Purpose

Build on our record of innovation in crop protection and seeds to develop new solutions that combine biology and chemistry, while incorporating adjacent technologies and building new business models.

Achievements

- Sales target for key crops upgraded from \$22 billion to \$25 billion
 - Full EU approval for isopyrazam attesting to our continuing strength in chemical invention; further corn trait approvals demonstrating the scope and quality of our trait portfolio
 - Acquisitions of Devgen and Pasteuria Bioscience, Inc. to accelerate the pace of innovation
 - Partnerships with Novozymes to extend our broad range of biocontrols
-

In 2012, progress in our integrated offers and the further development of our crop pipelines enabled us to increase our growth targets. We now expect sales of our eight strategic crops to reach \$25 billion by 2020, compared with a previous target of over \$22 billion.

The invention of strong new products forms the bedrock for the development of future integrated offers. One example is our new class of SDHI fungicides. SEGURIS® has now obtained full EU approval, while VIBRANCE® is extending its reach in cereals. SOLATENOL® is a fungicide to combat triazole-resistant rust. We can combine it with other chemistries and with new rust-tolerant native traits to extend our leadership in rust control.

AGRISURE® DURACADE™, our next-generation trait for corn rootworm control, received US regulatory approvals from the Food and Drug Administration (FDA) and Environmental Protection Agency (EPA) in 2012. The commercial launch of this trait in 2014 will further strengthen our leading offer for integrated insect resistance management.

Two acquisitions announced in the second half of the year represent valuable additions to our technology toolbox. Devgen's best-in-class rice hybrids and broad germplasm diversity will complement our world-leading crop protection portfolio for rice. Devgen also brings proven expertise in RNAi-based insect control, which will enable the development of new biological solutions across a number of crops. Pasteuria Bioscience, Inc. has developed the ability to manufacture at scale biological products for nematode control, with the first launch due in 2014.

Further advances in biocontrols will come from partnerships with Novozymes to commercialize two new products. JumpStart® is a seed treatment that optimizes fertilizer use by enhancing phosphate uptake; and Taegro® is a bacterial fungicide that complements our existing chemical portfolio.



\$1.25 billion

In 2012, we invested over \$1.25 billion in Research and Development, further progressing our crop pipelines.

Outperform

Purpose

Our goal is to create value for our shareholders by first creating value for our customers, using outperformance in the field to demonstrate our competitive advantage.

Achievements

- Double digit sales growth for the second consecutive year while implementing the new strategy
- 17 percent improvement in EBITDA at constant exchange rates
- 15 percent growth in earnings per share¹
- CFROI over 12 percent for the third consecutive year
- Proposed increase in dividend of 19 percent

The goal of our integrated strategy is to drive top-line growth while maintaining a high level of profitability. Commercial integration and the expansion of our offer will lead to market share gains. In Brazil, for example, where a single sales force has been in place for three years, increases in our corn seeds share clearly reflect the benefit of an integrated approach.

In 2012, we again increased earnings significantly despite currency and raw material headwinds. The EBITDA margin increased to 23.2 percent at constant exchange rates, helped by higher prices, trait royalty income and the realization of \$300 million in cumulative cost savings under the program to integrate Crop Protection and Seeds operations. Earnings per share increased by 15 percent¹ to \$22.30.

We continue to invest in order to drive top line growth, notably through R&D and through further expansion of our emerging market footprint. We have maintained leading positions in Latin America, emerging Asia and Eastern Europe, and Africa represents a growing opportunity.

Continuing strong cash flow generation enables us to invest for the future and grasp acquisition opportunities while still delivering superior returns to shareholders. We maintain a progressive dividend policy, and for 2013 are proposing a further 19 percent increase in the dividend to CHF9.50.



\$14.2 billion

Sales in 2012 exceeded \$14.2 billion, and we achieved double digit growth for the second consecutive year of our integrated strategy.

¹ Excluding restructuring and impairment

Regional overview

The strong growth in Syngenta's sales reflects our flexibility in providing solutions across crops and, increasingly, in addressing agronomic challenges through our integrated offers. These are proving their worth in developed and emerging regions alike, contributing to growth rates of 8 percent and 11 percent respectively.

Europe, Africa, Middle East

The year saw robust growth in the emerging markets of Eastern Europe and in the developed markets of France and Northern Europe, more than offsetting some weakness in Italy and Iberia. Growers adapted quickly following exceptionally harsh conditions in the first quarter, with an estimated 7 million hectares of cereals lost to freezing weather. Although Eastern Europe was particularly hard hit, our sales for the full year expanded strongly in the Commonwealth of Independent States (CIS) where the modernization of farming continues.

Increasingly, we are offering integrated protocols designed to meet specific needs such as early planting and cold tolerance. The hard winter caused many growers to switch to spring crops, leading to expansion in our sales of corn and sunflower seeds.

In Africa, sales growth was driven by South Africa and Kenya. The scale of our presence is set to expand in a number of other countries as we ramp up investment in order to achieve our objective of \$1 billion in sales by 2022.

Latin America

Once again, we achieved strong double-digit sales growth in Latin America, despite severe droughts in the early part of the year. In 2012, the region accounted for over a quarter of Syngenta's total worldwide sales for the first time. Growers' willingness to invest in seeds and crop protection was stimulated by record soybean prices and buoyant demand for second season corn. Investment in sugar cane is booming, mainly for ethanol production, and this drove strong growth in herbicide sales.

We are well positioned to benefit from these dynamic market conditions. We have a market-leading crop protection portfolio. We are spearheading the introduction of new technology in sugar cane; and we continue to augment our strong position in corn with new developments such as a quadruple stack seed including the AGRISURE VIPTERA® trait, which won regulatory approval in Argentina during the year.



"As the first country fully to integrate its commercial organization, Brazil has had strong growth over the last three years with important market share gain in seeds. We've also built a significant business there in sugar cane by developing new technology that increases sugar mills' productivity."

John Atkin
Chief Operating Officer
EAME & Latin America



“Our integrated offers are providing new benefits to customers in some of our most sophisticated markets. For example, combining technologies enables growers in the US corn belt to address the challenge of depleting water reserves and uncertain rainfall.”

Davor Pisk
Chief Operating Officer
APAC & North America

North America

Buoyant commodity prices drove corn acreage to a record level of over 96 million acres. However, over the summer growers in the USA faced the worst drought in 50 years. Crop losses were widespread, and corn yields were some 25 percent below expectations. Even in these challenging conditions, growers using our integrated protocols were able to achieve above-average results.

The increasing incidence of weed and insect resistance has highlighted the need for a multi-dimensional approach underpinned by good farming practice. This is accelerating adoption of Syngenta’s leading resistance management solutions and contributed to strong double digit sales growth.

Asia Pacific

In Asia’s emerging economies, market trends are playing to our strengths as growers adopt more modern farming techniques and recognize the benefits of high-value seeds and crop protection. Demand in the developed markets was more subdued; our sales were further affected by rationalization of the range to focus on higher-value products. In the second half, inadequate rainfall in large monsoon-dependent areas of South Asia reduced overall demand for crop protection.

Sales of corn seeds expanded rapidly, driven by the strength of our tropical germplasm, and investment in seed care increased. In vegetables, the launch of our integrated offers has led to increased awareness of the contribution that crop protection can make to yield and quality.



Regional sales ¹ \$m	2012
Europe, Africa, Middle East	3,974
North America	3,931
Latin America	3,713
Asia Pacific	1,827



Employees by region ²	2012
Europe, Africa, Middle East ³	12,417
North America	4,598
Latin America	5,095
Asia Pacific	5,152

Read more about “People” on [pages 38-39](#)

¹ Excluding Lawn and Garden
² Permanent full-time equivalent (FTE)
³ Including headquarters (Switzerland)

Crops in focus

We are making rapid progress in the development of a fully integrated offer on a global crop basis. By thinking like a grower, we aim to create truly innovative and transformative technologies that focus on a crop rather than a specific scientific discipline. We look beyond single products to create complete solutions that will benefit both people and the land for the long term.

All crop sales in this section are based on Syngenta estimates.

Corn

Sales in Corn \$m



Crop Protection	2,234
Seeds	1,378

2012 sales

\$3,612m

Target sales \$m

2015	~4,000
2020	~5,500

Corn pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

- Broad spectrum weed management
- Water optimization trait: AGRISURE ARTESIAN®

2015

- Integrated agronomic, water solutions
- ENOGEN® corn offer

2020

- Global molecular stack
- GM abiotic stress offers

🔗 For full pipeline visit www.syngenta.com/ar2012

Corn is grown worldwide and is mainly used for animal feed. Increased meat consumption, notably in Asia Pacific, is a key driver of demand for corn as livestock farming expands. In the United States, the crop is also used for the production of bioethanol, which reduces air pollution from vehicle fuel.

Corn is Syngenta's largest single crop and, with our broad and highly competitive offer, we are targeting rapid sales growth – from \$3.6 billion in 2012 to \$5.5 billion in 2020. We expect this growth to largely come from North America and the emerging markets. Critical to this expansion are: the combined portfolio in North America; the ability to transfer technology across regions; maximizing the reach of our broad germplasm base; and our leading crop protection portfolio.

North America – managing resistance

Technology has brought US farmers higher yield and greater convenience, but over reliance on single technologies is putting these benefits under threat. Our integrated, multidimensional approach enables growers to counter this threat.

Several years ago, we anticipated the development of weed resistance and developed novel herbicide mixtures that effectively control glyphosate-resistant weeds. We are also the leader in insect control, deploying a combination of traits, seed care and soil and foliar insecticides to manage resistance. For the 2013 season, we have launched a refuge-in-a-bag (RIB) offer with dual modes of action against both above- and below-the-ground pests. Our capacity for innovation has been demonstrated by the success of our distinctive broad-spectrum *Lepidoptera* trait, VIPTERA™, and by the development of AGRISURE® DURACADE™, a new mode of action against corn rootworm.

In 2012, the USA experienced its worst drought in 50 years, affecting an estimated one-quarter of the corn crop. Under these challenging conditions we were able to demonstrate outperformance by corn hybrids containing our AGRISURE ARTESIAN® native trait. Extensive trials have shown that it not only delivers superior yield under drought stress, but also maximizes yield in normal conditions. Traits are just one element of our water optimization offer: we are also combining crop protection and irrigation to bring higher yield with greater convenience.

High corn prices have caused pressure on margins for ethanol producers. This has increased the value proposition for ENOGEN®, the industry's first output trait in corn, which accelerates the conversion of starch to sugar in ethanol production. ENOGEN® brings a cost advantage of \$0.08–0.11 per gallon and makes more efficient use of energy and water, resulting in a carbon footprint reduction of more than 10 percent. We have signed commercial agreements with four ethanol plants, with further trials planned in 2013.

Leveraging our trait portfolio

In Latin America, second-season corn crops are the key to better land use and farm productivity. In Brazil, where 70 percent of domestic grain consumption is for poultry feed, growth in poultry exports is being constrained by grain availability and quality issues. We are leveraging our trait portfolio to address the particular needs of local farmers with the launch of AGRISURE ARTESIAN® for drought tolerance and VIPTERA™ to combat the insects that can cause mycotoxin contamination.

In Argentina, we received approval for a quadruple stack corn incorporating VIPTERA™ and will launch the product in 2013.

Early planting solutions

In Eastern Europe, we have been piloting an approach that integrates genetics and chemicals to combine early vigor and cold tolerance with higher yield and resistance to drought and heat stress. The program is accompanied by agronomic services and supported by new risk mitigation models.

Driving a step change in yield

In the developing countries of Asia Pacific, farm sizes are small and yield can be as low as 2 metric tons per hectare. We are building on our leadership in high-performing tropical germplasm and are tailoring our technology and integrated approach to help small-scale growers achieve a step change in productivity. Trials in Indonesia with progressive growers have shown that they can match the 10 metric tons per hectare achieved by large US farmers. The key is our “first 45 days” solution combining genetics, seed care and crop protection in easy-to-use protocols.



An integrated water solution revolutionizes production

“To be able to put Syngenta’s integrated water solution tools to use was priceless – it helped us to raise a good crop under extreme drought conditions.”

Theresa and John Schilke
(left and right)
Corn growers
with Ray Hanson,
Agronomic consultant
Imperial, Nebraska, USA

More online
www.syngenta.com/ar2012

Soybean

Sales in Soybean \$m



Crop Protection	1,883
Seeds	458

2012 sales

\$2,341m

Target sales \$m

2015	~2,500
2020	~3,500

Soybean pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

■ AMS APHID MANAGEMENT SYSTEM™: integrated aphid control

■ Management of resistant weeds: FLEXSTAR®

2015

■ SOLATENOL®; Integrated rust solutions

■ Disease resistance: *Fusarium*, *Rhizoctonia*, *Sclerotinia*

2020

■ Abiotic stress solutions

■ Herbicide tolerance: multiple modes of action

🔗 For full pipeline visit www.syngenta.com/ar2012

Soybean is the world's primary source of vegetable protein. About 80 percent is used for animal feed, with the remainder used either directly for food or in a wide range of industrial products. Demand is global and just three countries – the USA, Brazil and Argentina – account for over 80 percent of production. Consistently high soybean prices have encouraged investment in expanded acreage, crop protection and yield enhancement, particularly in Latin America. Soybean sales are targeted to reach \$3.5 billion in 2020 as our integrated pest control solutions gain momentum.

Unrivalled crop protection portfolio and expanding seeds offer

Soybean growers face a broad range of pests and diseases, and Syngenta offers them an unrivalled portfolio of crop protection products and an expanding seeds offer.

In parts of Latin America, the tropical climate means that disease control is a key priority for growers. Our leading position in the control of soybean rust – a potentially devastating disease – will be reinforced with the forthcoming launch of SOLATENOL®, our new leading-edge SDHI fungicide technology. We will be combining this new compound with existing chemistry to combat triazole-resistant rust and to set a new standard for disease control in soybean.

PLENUS®: The ready-to-sow soybean

"Producing the seeds ourselves is a huge operation as well as a logistical challenge. This is why I appreciate PLENUS® – it's convenient, it's simple, and it's safe."

Luis Gonzalez Victorica (right)

Director, Cazenave & Asociados SA with Esteban Lopetegui, Syngenta Buenos Aires province, Argentina

🔗 More online www.syngenta.com/ar2012



We are further investing in breeding to expand our genetics across all climatic regions, to accelerate yield gain through state-of-the-art technologies, and to bring innovative native traits to the market.

Innovative integrated solutions

We also provide a growing range of integrated solutions such as PLENUS®, which combines quality germplasm with crop enhancement and pest control products. The Syngenta AMS APHID MANAGEMENT SYSTEM™ combines an aphid-resistant native trait with CRUISERMAXX® seed treatment and WARRIOR® II crop protection to prevent aphid damage, which can result in up to 50 percent yield loss. In the USA, we are addressing weed resistance to glyphosate with a range of chemical formulations, and we have a new herbicide-tolerance trait under development that will allow the use of CALLISTO® in soybeans.

Soybean nematodes can cause yield loss valued at \$2 billion a year in North America alone. Over 80 percent of our soybean varieties have therefore been bred to incorporate genetic resistance to nematodes. In Brazil, we offer a seed care solution including AVICTA®, the most effective treatment for nematodes on the market.

To add to this platform, we have been developing new native traits and nematicidal bacteria with Pasteuria Bioscience, Inc. in the USA. Our acquisition of Pasteuria in 2012 will enable us rapidly to incorporate these products alongside our chemical range. Pasteuria's ability to manufacture at scale means that we expect our first biocontrol seed treatment for soybean cyst nematode to be ready for US launch in 2014.

Enabling growers to establish sustainable farming models

Europe is dependent on imported soybean and is leading demand for certified produce grown under sustainable farming models. Syngenta is the first company to provide services that help growers adapt their operations so that they can qualify for sustainability certification and capture a price premium. Our SUSTENTIA™ program, launched in Argentina in 2012, already covers 20,000 hectares. Plans are underway to extend the program to Brazil and Paraguay.

Cereals

Sales in Cereals \$m



■ Crop Protection	1,496
■ Seeds	103

2012 sales

\$1,599m

Target sales \$m

2015	~2,000
2020	~2,800

Cereals pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

■ Seed care and crop enhancement innovation: CRUISER®, CELEST®, MODDUS®, PALISADE®

■ Leading seeds business: wheat and barley

2015

■ Integrated solutions: hybrid barley, weed management, *Fusarium* control

■ New product launches: VIBRANCE®, SEGURIS®, BONTIMA®

2020

■ Targeted chemical-genetic interaction, new business models

■ Hybrid wheat: biotic, abiotic traits

🔍 For full pipeline visit www.syngenta.com/ar2012

Cereals are the world's largest crop by acreage and the largest food crop: around 80 percent of production is for food. They are grown almost everywhere – wheat is cultivated in over 120 countries.

Over the next few years we expect significant market growth as lower-yield regions around the world invest in technology to increase productivity. In the CIS, for example – with a planted area roughly the size of the USA, Canada and China put together – yield averages only 1.5 metric tons per hectare, compared with more than 6 metric tons in Western Europe.

Syngenta is the global leader in cereal seeds and number two in crop protection and seed care. We are aiming to increase sales at double the market growth rate by integrating our market-leading technology in seeds and chemicals. Sales are forecast to exceed \$2.8 billion in 2020 as new active ingredients and hybridization contribute to the development of integrated solutions. Our unrivalled presence across all of the world's significant cereals markets means we can tailor



Hybridizing barley: step change in productivity

“Hybrid barley has made a very good impression on us with high grain weight and good yields. It is different to conventional barley, but it works really well – otherwise we wouldn’t be using it here for the fourth year running.”

Frank Edelbauer (left)
Barley grower
with Ralf Becker, Syngenta
Wisselsheim, Germany

More online
www.syngenta.com/ar2012

solutions accurately to local soils, climate and grower needs. And our close connections with downstream processors – including brewers, bakers and pasta makers – enable us to help farmers meet their often very stringent requirements.

Leading the hybrid revolution

Traditionally, cereals growers have relied on open pollination and saved seed. Through targeted breeding of male and female plants, we can now produce barley hybrids with exceptional vigor and high yield.

Taking this a step further, we have launched unique protocols combining hybrid barley seeds and chemicals, which can raise yield by more than 10 percent and more than double profit per hectare. Second-generation hybrids now in the pipeline promise further yield improvements, and we are working to apply our hybridization experience to wheat. We anticipate strong growth in sales in the years to come as we broaden the reach of these offers.

In 2012, we formed two new breeding partnerships to expand our access to quality local germplasm. Under a barley collaboration with InterGrain in Australia, we will exchange germplasm to develop new integrated solutions and gain exclusive rights to commercialize InterGrain varieties outside Australia. In Argentina, our collaboration with Buck Semillas aims to develop new wheat varieties and integrated solutions for farmers.

Setting the pace in fungicides and herbicides

Disease in cereals reduces yield and grain quality, and can make wheat unfit for a variety of food uses. Our best-in-class fungicide portfolio is led by AMISTAR[®], which plays a vital role in yield and quality delivery. We are now making further advances with the launch of products from the new SDHI class of chemistry. These include isopyrazam, which received European Union (EU) approval in November.

Isopyrazam’s advanced “double-binding” technology ensures strong adhesion to fungus and to leaf wax, providing long-lasting and durable disease protection. Under the EU’s provisional approval system, British and Irish cereal farmers have for the past two growing seasons experienced the benefits of isopyrazam in SEGURIS[®] for wheat and BONTIMA[®] for barley. These growers have consistently achieved better disease control and higher crop yield, which has increased by up to 2 metric tons per hectare.

VIBRANCE[®], also from the SDHI class, is the first product on the market exclusively developed as a seed treatment. Launched in Argentina in 2011, it is now being introduced across Europe, North America and Australia. VIBRANCE[®] promotes strong root development and increases the number of shoots per row, leading to significantly higher yield per acre.

Infestation of *Fusarium* in wheat can result in mycotoxins, which cause an estimated annual economic loss of \$1.5–2.0 billion in terms of lower yield, lower prices and grain rejection. By combining our genetics, seed care and fungicides, and by providing analytical tools to detect and monitor the problem, we have been able to achieve dramatic reductions in mycotoxin levels.

Our cereal herbicide AXIAL[®] can be used on both wheat and barley, giving growers added flexibility. 2012 saw strong growth in the key Canadian market and successful launches in several other countries.

Using fertilizers more efficiently

New benefits are emerging for AMISTAR[®], the world’s leading fungicide. By extending greening, it enables the crop to deliver higher yield under a low fertilizer regime.

In 2012, we reached a global agreement with Novozymes to commercialize novel biological technology that enables crops to use phosphates more efficiently. Applied in combination with our seed care products, JumpStart^{®1} increases phosphate solubility in the soil and stimulates early crop establishment.

¹ Registered trademark of Novozymes

Rice

Sales in Rice \$m



Crop Protection	583
Seeds	7

2012 sales

\$590m

Target sales \$m

2015	~1,000
2020	~2,000

Rice pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

- TEGRA® prototype
- GROMORE™ expanding crop protection technology footprint

2015

- TEGRA® expansion
- RisoLution Pro and OptiGro

2020

- Strong active ingredient pipeline
- GM traits: insect control

📄 For full pipeline visit www.syngenta.com/ar2012

Rice is a staple food for almost half the world's population. Asia accounts for 90 percent of global production and consumption. The current rate of productivity improvement is not keeping pace with rising demand, which is driven by population and economic growth. Without an acceleration in productivity, the coming decades will see shortages and price inflation that could be devastating for the billions who depend on rice.

To meet the challenge, we are deploying multiple technologies: genetics to enhance yield, crop protection to secure this yield, and locally-tailored agronomic protocols to use our technology effectively. Our strategy is to develop fully integrated offers for both the transplanted-cultivation and direct-seeded markets.

Four key offers – GROMORE™, TEGRA®, OptiGro and RisoLution Pro – will enable us to reach all types of growers. By expanding the reach of these offers and fully exploiting our crop protection portfolio and agronomic advisory services, we aim to raise annual sales from \$590 million today to \$2 billion by the end of the decade.



GROMORE™: Aligned to the life cycle of rice

"I only had to plant 25 kg of seeds compared to 75 kg before, which gives me a much higher return on my investment."

Mohammad Fardaus Rana (left)
Rice grower with Nazmul Kabir, Syngenta Daribri, Bangladesh

📄 More online www.syngenta.com/ar2012

Focus on smallholders

Crop protection is the mainstay of our offer, and we have developed our range of GROMORE™ protocols to combine our existing technology and make it accessible to smaller farmers. This approach of coupling quality products with timely advice in the language of the farmer has secured immediate yield increases of up to 30 percent for growers in Bangladesh, Indonesia and Malaysia. A particular focus is the first 60 days of plant development – the seedling and vegetative stages. These are crucial to maximizing yield and fully exploiting the potential of improved seeds and crop protection inputs.

The GROMORE™ approach can be used globally, with protocols tailored to local conditions. It was the main driver of our 12 percent growth¹ in rice sales in 2012 and will spearhead our expansion into new markets.

Integrated solutions for all farm sizes

The other principal growth driver will be TEGRA®, our integrated growing system, which has shown an average yield advantage of 30 percent. TEGRA® enables growers to outsource seedling production. The full TEGRA® program is designed for growers with plots between one and five hectares and addresses the key challenge of labor scarcity and cost. We grow seedlings from high-quality seeds treated with CRUISERMAXX®, mechanically transplant the seedlings into the farmer’s field and then provide support with a GROMORE™ protocol. In 2012, we expanded TEGRA® sales in India and ran successful pilots in Bangladesh and Guatemala.

We are also perfecting patentable technology for producing and handling seedlings more efficiently. This will enable us to expand the TEGRA® program to suit both large- and small-scale farms. TEGRA® NURSERY will provide seedlings for large-scale growers who are already able to mechanically transplant. TEGRA® PADDY is for smallholders with fields or budgets too small for mechanization, but who still wish to improve the quality and convenience of their seedling supply.

Two further integrated offers will contribute to the achievement of our 2020 growth ambition for rice. OptiGro is a precision direct seeding method developed for medium to large farms in markets such as Northern India, the USA and Brazil. Promoted as “growing rice like corn”, it can offer more sophisticated growers a 300 percent return on their incremental investment.

RisoLution Pro is a production system for farmers in Japan, Korea, China and Europe who grow japonica rice varieties for high-end consumer markets. This system applies TEGRA® technology tailored to high-quality japonica seeds, with a GROMORE™ protocol that includes biological controls in the last 60 days of growth to comply with food processors’ residue requirements.

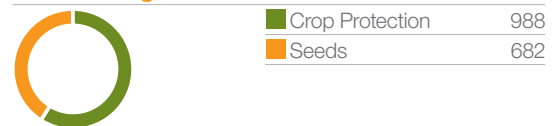
Harnessing the power of hybrids

For the future, we look to hybrids to help us achieve a step change in yields while maintaining genetic diversity to provide the many different types of rice needed to satisfy consumer requirements in local markets.

Our existing pipeline of hybrids will be significantly augmented by the acquisition of Devgen. This will reinforce our global leadership in rice by enabling us to incorporate the next generation of hybrid technology. Less than 5 percent of the rice seed used in Asia, excluding China, is hybridized. This represents huge scope for broad-based yield improvement. Devgen’s best-in-class hybrids and broad germplasm diversity will complement our crop protection portfolio and will accelerate the development of our integrated offers.

Vegetables

Sales in Vegetables \$m



2012 sales

\$1,670m

Target sales \$m

2015	~2,000
2020	>3,000

Vegetables pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

- Growth stage programs for emerging markets
- FARMORE® growth: fungicides, insecticides

2015

- Enhancement of biologicals offer
- Expanding output traits portfolio all crops

2020

- Integrated young plant solutions
- Breakthrough resistance management

For full pipeline visit www.syngenta.com/ar2012

¹ At constant exchange rates



Increasing vegetable yields with an integrated approach

“I increased my overall yield from 20 to 36 metric tons, and, thanks to the superior fruit quality, I also achieved a better price on the market.”

Narayanappa Narayanaswamy
Vegetables grower
Karnataka, India

 More online
www.syngenta.com/ar2012

Around 1 billion metric tons of vegetables are produced every year, with approximately 75 percent of the total grown in Asia. Because consumers around the world have very diverse preferences, vegetables are grown in many different varieties to suit local tastes and cuisine.

Our strategy is therefore based on serving the widely varying needs of a broad spectrum of growers across the world. These range from open field production by smallholders in many parts of Asia, to the highly intensive production found in countries such as Spain, Israel or the Netherlands. Vegetables sales are forecast to exceed \$3 billion in 2020 as we address multiple challenges in both developed and emerging markets.

Smallholder intensification

In emerging Asia and Africa, many farmers still use open pollinated seeds and invest relatively little in crop protection. Their productivity is correspondingly low. The introduction of hybrids is bringing higher marketable yield by increasing the amount of harvestable produce per plant as well as improving genetic tolerance to insects and disease. Through our integrated strategy, we are promoting simple, easy-to-use crop protection programs alongside these hybrids, resulting in significant improvements in yield, quality and reliability.

Early crop establishment

Good crop establishment is essential for growing healthy crops. We are focusing attention on the first eight weeks of growth, which have a decisive impact on quality and yield. We are driving the development and adoption of seed treatment with our comprehensive range of technologies for seed and young plant protection, delivered through our innovative FARMORE® seed treatment platform. This includes novel mechanized application methods such as Phyto-Drip®.¹ In North America and Mexico, we have expanded our FULL COUNT® young plant program, driving further growth in our melon business.

In developed markets, growers must meet ever more demanding specifications set by the value chain, with an increasing emphasis on sustainability and food safety. We enable growers to meet these standards through an integrated approach that combines genetics, chemical protection and beneficial insects such as our BIOLINE® biologicals. Our strength in molecular marker research enables us to identify genes relevant for many desirable food characteristics – such as sugar, texture or color – and to create new varieties expressing these genes by means of traditional, non-GM breeding techniques.

¹ Registered trademark of Precision Drip B.V.

Sugar cane

Sales in Sugar cane \$m



Crop Protection	259
Seeds	0

2012 sales

\$259m

Target sales \$m

2015	~1,000
2020	~2,000

Sugar cane pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

- PLENE® breakthrough planting technology and seed care solutions
- Optimized genetics

2015

- Abiotic stress solutions
- Next generation PLENE®

2020

- Plant expression for second generation biofuels
- GM traits for sugar content

🔗 For full pipeline visit www.syngenta.com/ar2012

300 fields of integrated solutions

"It's great to experience such a wide range of benefits on the field. I believe that the true potential of sugar cane can only be revealed through the integration of technologies."

Luis Arakaki

Owner, Alcoeste Mill
Fernandópolis, Brazil

More online
www.syngenta.com/ar2012



Cane supplies around three-quarters of the world's sugar consumption. Demand is rising rapidly but a historical lack of investment has meant that growers are struggling to keep pace.

Our sugar cane activity is mainly focused on Brazil, which accounts for over a third of global output. Expansion there has been accelerated by the development of the biofuel industry: sugar cane is the most cost-efficient feedstock with the lowest CO₂ balance for plant-derived ethanol used in vehicle fuel. Ethanol accounts for about half of Brazilian cane output, but production is still falling short of demand. Sugar cane is currently the smallest of our eight strategic crops but will expand significantly with the growing use of technology in Brazil.

Boosting yield to meet demand

In recent years, Brazilian yields have stalled at around 80 metric tons per hectare. Aging cane stocks and a high incidence of pests have hindered yield advances and exacerbated production shortfalls.

We believe that growing awareness of the potential of technology will lead to significant increases in both acreage and investment over the next 10 years. Proof of this is already coming through in a dramatic increase in demand for our herbicides. Building on the breadth of our range, we are able to extend the offer across the growing cycle by incorporating products including MODDUS®, PRIORI XTRA®, CALLISTO® and ACTARA®. The benefits extend beyond pest control by boosting vigor and elevating sugar levels at the time of harvest. Total crop protection sales in sugar cane were up by 25 percent in 2012. To support our integrated solutions, we created 300 commercial size test fields in Brazil.

Investing in for the future

Our novel PLENE® agronomy system brings together chemicals and genetics, and facilitates the renewal of sugar cane plantations. We have expanded our offer to include seedlings and young plants produced at our new biofactory in Itápolis, Brazil, which is the largest in the world for sugar cane. We plan to ramp up production from 3.5 million to 6 million young plants per year.

Rising demand makes sugar cane an increasingly attractive crop in a number of other countries, such as India and South Africa, where there is also significant potential for increasing investment.

A further longer-term opportunity lies in our development of GM traits to address needs such as drought stress and sugar productivity. The use of enzyme technology to increase the amount of sugar expressed by the plant could make a significant improvement to land productivity.

Diverse field crops

Sales in Diverse field crops \$m



Crop Protection	692
Seeds	607

2012 sales

\$1,299m

Target sales \$m

2015	~1,500
2020	~2,200

Diverse field crops pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

- Crop vigor and plant establishment: CRUISER®, HELIX XTRA®, FORCE® MAGNA
- High value hybrids: NK®, SYNGENTA®, SPS®, MARIBO®, HILLESHÖG®

2015

- Total control solutions: broomrape, nematodes, *Rhizoctonia*, *Phoma*
- Enhanced root health: VIBRANCE®

2020

- Targeted chemical-genetic interaction
- Wild trait introgression

📄 For full pipeline visit www.syngenta.com/ar2012

Diverse field crops comprise sunflower, oilseed rape and sugar beet. In each of the geographies where these crops are grown, they offer growers a sustainable crop rotation with cereals and a good return on investment for participants in the value chain. Sales of diverse field crops are expected to exceed \$2 billion in 2020 as we build on our leading seeds portfolio to launch integrated offers.

Global demand for vegetable oils is growing at about 4 percent a year. Sunflower and oilseed rape represent some 20 percent of this market and are benefiting from a rising demand for healthy oils. Sugar beet provides around a quarter of the world's sugar and is also used in biogas and ethanol production.

Syngenta was early to recognize the growth potential for sunflowers, supplementing organic growth with acquisitions.

Today, we are the world leader in sunflowers due to our portfolio of high-quality seeds – both conventional and high oleic hybrids – and our seed care and crop protection range. Because sunflower is a hardy crop that faces relatively few pest challenges, seeds represent some 70 percent of the total market value. However, as awareness of the value of the crop increases, so do the opportunities for incorporating seed care and crop protection.



Technology adoption put to the test

"I am using the most advanced Syngenta technology together with the latest conservation tillage practices, and I am working above 5 metric tons per hectare consistently."

Ferenc Miko (center)
Sunflower grower
with Péter Heicz (left)
and Ferenc Erbár (right),
Syngenta
Enying, Hungary

📄 More online
www.syngenta.com/ar2012

Investing to supply quality hybrids

Russia and the Ukraine already account for about half the world’s sunflower acreage and are transitioning from open pollinated varieties to high-value hybrids. To speed this development, we plan to invest up to \$85 million in building a hybrid seed and crop protection production facility in Russia.

We are also building a new sunflower and corn seed processing plant in Argentina, expanding facilities at seed production farms, and continuing to invest in seed development at our network of field stations. In the USA, the acquisition of Sunfield Seeds in November further strengthens our supply chain capability to enable future growth.

Expanding the technology offer in sunflowers

We have signed a global agreement with BASF to license its Clearfield® Plus herbicide tolerance technology for use in sunflowers, and will also sell BASF’s associated imazamox-based herbicides in Europe. When combined with our best-in-class hybrids, these products will increase the choices available to sunflower growers for maximizing yield and competitiveness.

New solutions in oilseeds

Canola in North America is often associated with oilseed rape in Europe, but the two crops require different approaches. Canola is almost entirely hybridized, and there is a high level of biotechnology adoption.

We have long-standing experience of canola in Canada through our comprehensive crop protection portfolio. With complete offers commanding a significant premium, we announced in October that we will bring canola seeds to market for the 2014 growing season. This will facilitate the delivery of new canola solutions for Canadian growers.

We are also advancing technology in winter oilseed rape in Europe, where the crop represents the main source of plant-based biodiesel and is rapidly transitioning from varieties to hybrids. We have developed SAFECROSS®, a proprietary hybridization system, which offers numerous benefits in terms of both breeding and supply chain management.

Post-harvest challenges in sugar beet

The challenge of producing sugar beet does not end with harvest. Sugar companies are confronted with diminishing sugar content for every day that the beet spends in storage, and there is also a risk of root rot if disease is present in the crop. We are leveraging our experience with post-harvest chemistry in crops such as potatoes to develop solutions that not only increase yield in the field, but also help protect the sugar beet once it has been harvested.

Specialty crops

Sales in Specialty crops \$m



Crop Protection	2,049
Seeds	2

2012 sales

\$2,051m

Target sales \$m

2015	~2,500
2020	~4,000

Specialty crops pipeline highlights

■ Integrated Solutions ■ Crop Protection ■ Seeds

2012

- Partnerships, e.g. Fundação MT: in licensed germplasm, crop protection and seed care in cotton
- Crop protection technology footprint and breadth

2015

- Chemical-genetic solutions: potatoes and cotton
- Crop enhancement potential for abiotic benefits: VERDADERO®, AMISTAR®, MODDUS®

2020

- Chemical-genetic solutions: tree and vine crops
- Adjacent technologies integrated into solutions

📄 For full pipeline visit www.syngenta.com/ar2012

Our specialty crops business covers over 40 diverse, high-value crops grown around the world. Five crop groups account for around 70 percent of total sales: potatoes, cotton, citrus and pome fruits, grapes, and plantation crops such as bananas and coffee. Our broad portfolio of chemical and biological products present exciting opportunities to bring new technology to these markets. We believe the business has potential to grow from \$2 billion annual sales today to over \$4 billion in the next 10 years.



Every tree counts

“Thanks to Syngenta’s commitment and expertise, *Phytophthora* management is now a fundamental part of our overall Greening strategy, and it appears to be reducing the impacts of Greening in our citrus groves.”

John Smoak (right) President, Smoak Groves, Inc. with Edward Smoak (center), Managing Principal, Smoak Groves, Inc. and John Taylor, Syngenta Lake Placid, Florida, USA

More online www.syngenta.com/ar2012

Scaling through integrated solutions

Cotton insects and diseases are adapting to better traits and changing environmental conditions. This creates demand for our leading crop protection and seed care portfolios, particularly where we can integrate our technologies with quality genetics. In Brazil, we have strengthened our partnership with Fundação MT, combining its premium seeds with our leading active ingredients and strong market access to create integrated solutions that offer farmers higher returns.

For small-scale farms in India, we are developing agronomic protocols to enhance convenience and yield. And in the USA, we are prototyping a drought-resistant platform to deliver environmental and economic benefits.

Potatoes – closing the yield gap

We have the market-leading crop protection portfolio in potatoes, with particular strength in seed care and fungicides to control blights. Yields in developed markets exceed 40 metric tons per hectare, though they are generally much lower in emerging markets.

To address this yield gap, we are expanding our portfolio to include seed production, and increasing our focus on the early crop establishment stage. In China, the world’s largest potato producer, we have developed potatoes for high-quality commercial seed production to give predictable yield and consistent quality. These are key priorities for potato processors.

Integrating quality and sustainability in grapes

To meet the increasingly rigorous expectations of consumers and the food chain, we are developing integrated solutions for a number of crops, combining chemical and biological controls. In 2012, we launched our integrated crop management program for grape growers. This program incorporates crop protection and market access compliance support, along with guidance in meeting sustainability criteria. Within 10 years, our aim is to have one in four bottles of wine worldwide produced using our integrated solutions.

Fighting disease and pests more sustainably

Bananas are the most internationally-traded fresh fruit. They play an important role in countries such as Ecuador, where they account for half of national agricultural GDP. We have the industry's leading portfolio for disease and insect control, including isopyrazam for control of the prevalent fungal disease black sigatoka. We are expanding into biofungicides, working on new nematode solutions to improve the crop's environmental footprint, and seeking alternative ways to improve yield and fruit quality. We are also rolling out internationally a new sustainable production technology developed in Ecuador. This captures crop information in the field to enable tailored protocols that take plant conditions and weather forecasts into account.

Better deals for coffee growers

We continue to expand our Brazilian coffee business, built on the combination of our crop protection technologies and our proprietary NUCOFFEE® business model. Launched in 2006, it involves the entire production chain and handled a total of 270,000 bags in 2012.

As well as products, we offer consulting to produce superior quality beans, better traceability and product marketing – resulting in an increase of up to 50 percent in growers' revenues.

In other major coffee producing countries such as Colombia and Vietnam, we continue to improve agronomic practices and market access, supporting smallholders' livelihoods, sustainability and coffee quality.

Lawn and Garden

2012 sales

\$ 757m

Target sales \$m

2015	~800
2020	~1,100

We also apply our world-leading agricultural technology in the turf and landscape and flowers markets, where we are the market leader.

Simplifying and focusing the business

Our aim is to outperform the market by focusing on integrated solutions based on high-value chemistry and genetics. In 2012, we simplified the business in order to gain scale in these areas and to improve profitability.

The acquisition of the DuPont Professional Products insecticide business broadens our portfolio of high-value chemical controls and includes established product brands. The acquisition will expand the range we offer to golf course and lawn care professionals as well as to ornamental growers, and will also strengthen our position in home pest control.

Also in line with our strategic focus, we divested two lower-margin businesses. The Fafard growing media business was sold to SunGro, with whom we will continue to collaborate in order to include growing media in our integrated offers. We also divested our Flowers distribution and brokerage business, Syngenta Horticultural Services, to Griffin Greenhouse Supplies Inc. Griffin has signed a long-term agreement to distribute and broker Syngenta Flowers genetics throughout the USA.

The flowers market has been under significant pressure because of low consumer confidence during the economic downturn. In order to streamline our operations and leverage our assets, we have combined our professional and consumer business units. This will concentrate resources behind the delivery of offers that span the needs of the entire value chain.



Turning the corner in the turf market

“In this challenging market, Syngenta gives us the best products and the best service for our customers. What I appreciate most is the flexibility and customer-focused cooperation at field level.”

Jack Harrell, Jr. (left)
Chairman and CEO,
Harrell's LLC
with Dave Ravel, Syngenta
Lakeland, Florida, USA

 More online
www.syngenta.com/ar2012

Innovating to provide integrated solutions

We do not just sell plants to our customers, we provide complete growing solutions. In Japan, HANA-SHIKSAI® – which means colorful flower – offers convenience and reliability with the promise “Just add water”. This solution appeals to inexperienced gardeners who happily exchange convenience and satisfaction for a significant price premium.

Our growing protocols and retail programs also recognize the desire among retailers to minimize inventory wastage. Combining our genetics and chemicals expertise, we have developed a range of superior genetics grown in trays containing chemical controls and fertilizer. After a successful prototype in Japan, we are now expanding to commercialize with a leading gardening and DIY retailer at over 1,000 stores, and will pilot the concept in the USA and Europe with strategic partners.

In the golf market, we work with course operators and greens keepers to make golf courses more playable and attractive, while also making their operations more profitable and sustainable.

Our holistic approach and integrated solutions result in optimal playing surfaces that use less water, require less frequent mowing, and create habitats on the golf course that sustain pollinators and increase biodiversity.

In 2012, we rejuvenated our flagship DAPONIL® fungicide brand by combining it with another chemical that boosts turf's natural defenses. DAPONIL® ACTION offers broader disease control and enhanced drought tolerance. In its first year, it has lifted the market share of DAPONIL® to 40 percent. Learning from its success, we are launching another differentiated fungicide, Secure®¹, to extend further our golf market leadership.

Partnering to create new possibilities

Collaborating with partners broadens our opportunity to create market-shaping products. In partnership with The Scotts Miracle-Gro Company, we have launched Patch Magic®² in Switzerland. This breakthrough in grass seed combines seed and fertilizer in a single application and solves the widespread challenge of bare lawn patches.

¹ Registered trademark of an ISK group company

² Registered trademark of OMS Investment, Inc.

Building on our strengths

Our challenge is to grow more from less – year after year, sustainably. We know we cannot do this on our own, but recognize that we have a part to play and a responsibility to play it well. To maximize our contribution, as well as our commercial success, we need to excel at innovations and partnerships. We are committed to collaborating with the many groups that share our vision of feeding an ever-growing population, while maximizing the positive impact on people and the environment.

Research and Development

With over 5,000 people at Research and Development (R&D) centers and field stations worldwide, Syngenta is the leader in grower-focused innovation. In 2012, we invested \$1.25 billion in developing quality seeds and crop protection products, as well as crop-based solutions that integrate our genetic and chemical technologies.

Investment in R&D \$bn

2010	1.08
2011	1.19
2012	1.25

During the year, we made good progress in building the new R&D organization, especially the global platforms that support integrated solution development such as our portfolio management and trialing platforms. We also made progress delivering more cross-functional ways of thinking and working. Teams are becoming increasingly more proficient at sharing knowledge and gaining inputs from multi-disciplinary networks, as well as utilizing the global expertise in the company to solve challenges, shape the portfolio and create breakthrough integrated solutions addressing growers' needs.

Delivering innovation

We are at the start of a journey to leverage the full benefits of our new R&D organization, and teams are already working on exciting integrated projects for all our crops.

For example, the parasitic weed broomrape can drastically reduce sunflower yield. As the global market leader in sunflowers, we are establishing a Broomrape Center of Excellence in Stein, Switzerland. A team is already working on combining genetics with herbicides, seed care and crop enhancement chemistry to create new solutions. Once we prove the concept on broomrape, we plan to extend it to other parasitic plants in crops, including rapeseed, tomatoes and corn.

Another integrated project is seeking new ways to combat nematodes – parasitic worms that attack the roots of many crops. In tomatoes, resistance breeding and pesticides do not provide enough protection on their own, so we are working on solutions that complement genetics with chemistry. The promising results so far suggest a potential model for other vegetable crops.

SOLATENOL[®], with an initial launch in Paraguay, brings best-in-class control of rust in soybean and a new mode of action to combat triazole resistance, confirming our strength in SDHI chemistry (succinate dehydrogenase inhibitors). SDHIs are a new class of fungicides that also include our products isopyrazam and sedaxane. This work exemplifies our expertise in “designer chemistry” – adapting a backbone structure to produce a family of molecules with different properties and chemical behaviors to address a variety of crops and pest targets.

AGRISURE ARTESIAN[®] is a native trait that helps plants use water more efficiently at every growth stage to provide season-long defense against drought. Results from US field trials in 2012 confirmed that corn hybrids with AGRISURE ARTESIAN[®] outperform comparable hybrids. Innovative precision application systems combining water and crop protection chemicals are a further development in water optimization.

Our seeds products continue to win recognition for innovation. In 2012, our new ANGELLO™ sweet seedless pepper won the Innovation Award at Fruit Logistica, the fruit and vegetable sector's leading trade fair. And the Syngenta Flowers creation LANAI® TWISTER RED, a tri-colored hybrid verbena, won the 2012/13 FleuroStar Award.

Many more examples of our innovation delivery can be seen on pages 22 to 35.

Investing in innovation

Our investment in establishing a global biotechnology platform made major advances in 2012. We started to extend our facility in North Carolina, USA, with climate-controlled greenhouses and precision growth chambers. *Science* magazine has also ranked us in the Top 20 biotech employers for the fourth year running. In particular, we were highly rated for important, quality research, social responsibility and treating employees with respect. This recognition is invaluable as we continue to grow and recruit across all disciplines.

Investment in our breeding capability and supporting infrastructure has also been key this year. We are building a new facility at Jealott's Hill in the UK to support the critical "double haploid production" process for breeding wheat, and we further established the Syngenta Breeding Academy, to enhance the capabilities of people across R&D in breeding and related disciplines. The academy gained momentum in 2012 with several successful internal courses and an extended training offer through universities and academic institutes. This academy is designed not only for expert breeders, but also to help anyone working on integrated solutions to understand the fundamentals of breeding crops.

An open approach to innovation

Our collaborative approach extends to external partners whose expertise and technology complement our own. We currently have over 500 R&D collaborations with universities, research institutes and commercial organizations around the world. Research agreements signed in 2012 include deals to broaden further our germplasm and traits base, and a partnership with Huazhong Agricultural University in China to advance Bt insect trait lead discovery.



"Innovation is at the heart of Syngenta. In 2012, our R&D teams delivered pipeline commitments while also enabling future crop strategies. The focused investment in global technology platforms and new capabilities this year will ensure that we deliver future innovation at scale."

Robert Berendes
Ad Interim Head
Research & Development

An important part of our strategy is to ensure that we continually improve our capability and remain at the cutting edge of science. In 2012, we made two important acquisitions that demonstrate this: Devgen and Pasteuria Bioscience, Inc.

With the acquisition of Devgen we gained improved breeding approaches and best-in-class rice hybrids that will help us accelerate our rice strategy and the development of integrated solutions. Devgen is also a pioneer in RNAi technology, which regulates specific gene products, offering biological ways to combat insect pests through sprays and plant traits. Although at an early stage, this technology offers a lot of potential.

We further strengthened our biocontrols portfolio by acquiring Pasteuria Bioscience, Inc., with whom we have been developing bacterial products to combat nematodes. The deal brings us a revolutionary production process and the first product, a seed treatment for soybean cyst nematode, which is due for launch in 2014.

We have had significant success in using Internet platforms for external problem-solving support and to attract new ideas from individuals, institutions and organizations. In particular, our Syngenta THOUGHTSEEDERS® portal has proven effective in sourcing ideas that have led to high-value projects. Sharing knowledge is a two-way activity, and we are taking the lead in developing progressive new models for sharing intellectual property. Our new e-licensing platform provides open access to our patented native traits under fair and transparent conditions.

People

The rapidly changing nature of our business requires constant investment in our people. We must continue to attract, develop and retain the talent and capabilities needed to achieve our ambitious goals.

Developing careers and capabilities

Our integrated approach to talent development gives all employees the opportunity to develop their careers, whether locally or globally. As teams become increasingly global, we need to support strong collaboration across all functions and geographies. From an employee performance perspective, there is a growing emphasis on recognizing and rewarding not only what we deliver, but also how we deliver in a way that is aligned with our corporate culture and values.

Our learning and development teams are producing new programs to build the capabilities required by our industry. We deliver these programs in a variety of ways that are designed to be applied to specific business challenges. In 2012, we invested \$24.6 million in training programs delivered by external partners.

We have a high employee retention rate with an attrition rate, excluding restructuring and retirement, of less than 6 percent in 2012. The total turnover rate was 12.4 percent, reflecting the realization of planned cost savings and organizational change related to the integrated strategy.



“Syngenta’s performance rests firmly upon our culture of innovation, and this helps us to attract and retain the very best talent. We focus on maintaining an inspiring and productive workplace in which our employees are able to learn and grow.”

Caroline Luscombe
Head Human Resources

Recognizing contributions from across Syngenta

We continue to recognize the contributions of individuals and teams through our Syngenta Awards program. In 2012, 906 entries were submitted – representing around 8,000 employees. Sharing inspiring stories and learning from one another’s experiences is a strong characteristic of our culture.

We have completed 23 Crop Demonstration Days, which brought to life our strategy and ambition for more than 18,000 employees and external stakeholders. Sessions led by key people from across the organization deepened participants’ understanding of our integrated strategy and its potential.

As a global business, we believe diversity and inclusion are essential to continuous innovation and strong performance. Our diverse workforce enhances our ability to develop solutions, which fulfill our customers’ needs. In 2012, we appointed a Global Head of Diversity and agreed a company-wide diversity and inclusion strategy. In the first instance, we will focus on gender diversity through leadership development and tailoring our existing mentoring programs. In 2012, women held 20 percent of the management roles and 13 percent of the senior management roles.

Health, safety and wellbeing

Employees’ health and safety are crucial. We have rigorous safety policies and expect everyone in the business to take personal responsibility for safety.

Our Goal Zero initiative seeks to achieve zero harm to people and zero safety incidents. All accidents are preventable. Launched in 2011 to maintain focus on safety during the integration of our production sites, it has since been extended to other parts of the business including R&D.

For most of our people, the activity with the highest risk is driving. In 2012, we expanded our global program of safer driving and cycling initiatives. These are tailored to individual regions: in Vietnam, for example, where sales staff often travel by river, we conduct boat safety training. Globally, we recorded an 8 percent reduction in incidents in 2012.

Across the business, we recorded a 2012 illness and injury rate (per 200,000 hours worked) of 0.39 – beating our target of 0.5. The safety of our people is paramount, and we will continue to work to reduce all incidents.

Recordable illness and injury rate
per 200,000 hours

2010	0.41
2011	0.44
2012	0.39

We are also paying increasing attention to employees' health and wellbeing. Our efforts so far have been spearheaded by North America, where healthy-living initiatives include exercise programs targeting at-risk groups such as manual workers.

 See detailed "People" performance data on [page 60](#)

Manufacturing and procurement

Our expanded growth ambitions for the rest of this decade present an exciting challenge for our Production and Supply organization. While building the capacity to support \$25 billion of sales by 2020, we are further improving the basic processes that guarantee consistent product quality and safety.

Expanding production capacity

In 2012, we completed major expansion projects at several sites. We opened an expanded integrated corn seed plant at Mezőtúr in Hungary – now our largest European seed processing facility – as well as a corn processing plant in Indonesia, and began production of new E-Z REFUGE™ corn products at our enlarged facility in Nebraska, USA. To meet growing demand for new integrated solutions, we opened a new biofactory for sugar cane in Brazil and expanded TEGRA® rice capacity in India.

Looking further ahead, design work is progressing for a new corn and sunflower processing plant in Argentina, and we have announced our intention to build an \$85 million integrated hybrid seed and crop protection facility in Russia.

Our active ingredient (AI) production facilities responded well to the increase in demand, breaking several internal records. We were able to step up production of corn herbicides to meet higher demand stimulated by high crop prices.



"Achieving our ambitious goal of \$25 billion in sales rests on our ability not just to innovate but to do so at scale. Our world-class production and supply teams play a critical role in bringing innovation to our customers across the world in an efficient, safe and sustainable way."

Mark Peacock
Head Global Operations

Reducing procurement costs

We work closely with our key suppliers as business partners. While our focus over the past year has been on helping them to increase capacity, we have also been able to achieve significant cost savings both in raw materials – despite high feedstock prices – and in procurement of goods and services, where savings reached a record annual total of \$100 million.

Our technology and engineering teams also helped to achieve significant economies through efficiency improvements. They beat our previous record for the fastest introduction of a new active ingredient, and successfully tested a new patented sorting technology for hybrid barley with potential to increase production output significantly. Multiple expansion projects were completed or progressed during the year, and we launched many new formulations.

We maximize our intellectual capital by sharing knowledge effectively. In 2012, we were again ranked among Europe's eight Most Admired Knowledge Enterprises for sharing knowledge to increase stakeholder value.



Our commitment to fair labor

“I am pleased that my business was 100% compliant with the Syngenta standards at the FLA Program audit. It will help me to be fully compliant with local regulations.”

Marcos Lázaro (center) Farmer and Seed Supplier with Fernando Adorno (left) and Mateus Remor (right), Syngenta Unai, Brazil

More online www.syngenta.com/ar2012

Responsible production and supply

We strive for industry-leading health, safety, environmental and quality (HSEQ) performance in our plants and supply chain, and see this as an essential aspect of market leadership.

We have a well-established program to identify and address process safety issues in our eight key active ingredient (AI) plants, and we audit a sample of all production sites each year to ensure HSEQ compliance, consistency and leadership. In 2012, we were pleased to win a prestigious UK Chemicals Industry Association Process Safety Leadership award for our Huddersfield AI plant, and a Houston’s Healthiest Employer Award for our Greens Bayou AI site in Texas.

We continue to invest in robust quality procedures, assessments and improvement processes. In 2012, we started the integration of our chemicals and seeds quality management systems, while maintaining our focus on codes of practice in critical areas such as those involving genetically modified material.

During the year, we also conducted comprehensive security reviews and developed action plans at all Syngenta sites in high-risk countries. These paid particular attention to the security of our people and their families.

In some markets, counterfeiting of our products presents hazards for users and the public, as well as commercial and reputational risks for Syngenta. In 2012, we increased our efforts to identify and combat this growing challenge.

We expect our key suppliers to meet the health, safety and environmental standards that we set for ourselves. Minimum requirements for all suppliers are included in all new contracts and contract renewals. We assess suppliers against our global minimum standards for health, safety and environment, as well as labor and human rights. In 2012, we conducted 109 assessments of our chemicals suppliers, using a refined and broadened methodology that now includes process risk assessment.

In addition, we carried out 115 HSEQ assessments at warehouse and logistics service providers to ensure compliance with our standards. To audit our seeds suppliers, we use a methodology we jointly developed with the Fair Labor Association (FLA). Originally focused on India, we have expanded these audits to cover seeds suppliers in Eastern Europe and Latin America. In 2012, 17,625 suppliers were covered in the FLA Program.

Seeds supply farms in the FLA Program

2010	11,886
2011	16,880
2012	17,625

See detailed “Manufacturing and Procurement” performance data on [page 61](#)

Environment

As an agricultural business, we aim to grow by helping farmers use less land, energy and water to produce more and better food. But, as with all manufacturing, we are dependent on natural resources for the production of seeds and chemicals. We aim to reduce our footprint throughout our operations. We actively manage our emissions and use of resources, and track and report on operational intensity.

Our production facilities worldwide use a robust environmental management system to monitor impacts and identify ways of reducing them. Local environmental laws and regulations vary widely, as does the level of enforcement. Our policy is to treat all local requirements as an absolute minimum. The standards we set for ourselves often greatly exceed those required locally as we strive for consistency across the organization. And we constantly raise the bar to meet society's rising expectations.

Resources in operations

Every year we work towards enhancing our environmental reporting by improving data quality and adding new relevant sites to the reporting scope. In 2012, Syngenta saw an increase in production activities across most sites, resulting in higher absolute environmental figures compared to 2011. However, looking at the resource intensity – total use per dollar operating income (\$EBIT) – we have again observed an overall improvement in our environmental performance. For example, our total energy consumption increased by 7 percent to 9,336 terajoules, but energy intensity in megajoules per \$EBIT showed a decrease of 4 percent.

We set site-specific energy, waste-reduction, air emissions and water-use targets, so that each facility can focus on the initiatives that will achieve the greatest impact.

At group level, we set a 40 percent carbon intensity reduction target, from 0.93 kilograms of CO₂ equivalents emissions per dollar of operational income (kg CO₂e/\$EBIT) in 2006 to 0.56 by 2012. The CO₂e emissions intensity in 2012 was further reduced to 0.59 kg CO₂e/\$EBIT, translating to a 37 percent reduction over the six-year period, just short of our target. The purpose of this target was to help us continuously reduce our carbon intensity, while managing significant growth in our production. We are proud of the progress we have made, and remain committed to reducing our carbon intensity in the future.

CO₂e emissions intensity CO₂e kg/\$EBIT

2010	0.66
2011	0.61
2012	0.59

A considerable proportion of our carbon footprint comes from outside Syngenta's operational control. We can make a big difference by working with suppliers to help them identify low carbon options – which can also deliver valuable cost benefits. Suppliers are increasingly willing to collaborate with us as they see the competitive and economic advantages.

Our continuous effort to reduce our environmental footprint has led to a further reduction of our other air emissions to 0.52 gram per \$EBIT in 2012 from 0.63 in 2011.

Not only is water essential to growing crops, but it is also an important part of our production. Our operations use water for cooling, irrigation, processing and in product manufacturing. From the 33.8 million cubic meters of water used in 2012, more than half was used for cooling alone. Of this, more than 90 percent could be released back into rivers and lakes without the need for wastewater treatment.

Over the past three years, we have steadily improved the quality and range of water usage data that we collect. In 2012, we focused our attention on improving data collection particularly on the withdrawal in areas where there is greatest pressure on supplies.



Safe use training in China

"One of the main points of the training is to teach farmers how to use pesticides safely and in moderation."

Han Weijun
Agronomist
Yunnan Institute for the Control of Agrochemicals
Kunming City, Yunnan, China

More online
www.syngenta.com/ar2012

We actively manage waste on all our sites. In 2012, our wastewater effluent intensity continued to improve to 3.9 liters per \$EBIT – a reduction of 6 percent compared to 2011. Hazardous waste was reduced to 0.07 kg per \$EBIT, which is a 17 percent reduction. The amount of non-hazardous waste increased by 16 percent compared to the previous year. Most of this comes from an increase in recycled plant material. We increased the amount of non-hazardous waste being recycled or re-used from 68 percent in 2011 to 73 percent in 2012.

Earning external recognition

Several of our facilities received awards from local regulators and stakeholders. Our Karachi site won the ninth Environment Excellence Award from Pakistan's independent, UN-affiliated National Forum for Environment & Health, and the Kunshan site in China received a \$30,000 Green Production prize from the Kunshan Government for energy saving and waste management.

 For detailed "Environment" performance data see [page 62](#)

Responsible agriculture and product safe use

The safe and responsible use of our products is fundamental to our ambition of helping farmers to grow more food using less resources. Our stewardship covers responsible agriculture programs and safe handling and storage of our products.

As farmers steward their land, so we steward our products – from discovery to eventual disposal. We aim to help growers intensify their production sustainably, and we manage our technology responsibly.

This starts with R&D, where we think holistically about new molecules and seed varieties – considering safety, environmental impact and regulatory concerns next to efficacy at the earliest practicable stage.

Making products fit for the future

To make products fit for the future, we need to anticipate possible developments in regulations. The products that do best long term will be those that meet today's and tomorrow's challenges – to protect their longevity, we must ensure their usage continues to meet regulatory standards.

Educating growers in safe use is part of this. But we can also design or formulate products to make them safer and easier to use. For example, by reformulating seed coatings, we have been able to generate less dust during production.

With the expansion of GM technology in corn, US farmers have been required to maintain refuge areas that are free of traits in order to prevent the build-up of insect resistance. Our new 'refuge-in-a-bag' seed offer eliminates the need for these areas by mixing the requisite quantity of conventional seed in with the traited hybrids. This provides added convenience for the grower while ensuring good farming practice.

Our proactive approach includes our stewardship managers working together with product teams to assess their products' fitness for the future and to address any issues in advance. That means making sure that sustainability is considered in their product strategy, taking into account not only the way products are used, but also areas such as resistance management or groundwater impacts.

We also recognize how our own business is changing. For example, as our seed production sites increasingly carry out chemical treatments, we have redesigned training, equipment and working practices to meet chemical industry, rather than agricultural industry standards.

Teaching people to use products safely

The health, safety and environmental impacts of our products are governed to a large extent by the way users mix and apply them. We teach the safe, efficient use and disposal of our products worldwide through over 90 programs, which involved 3 million people in 2012. We are committed to maintaining this level of training while monitoring and enhancing its effectiveness.

Number of people trained m

2010	3.2
2011	2.9
2012	3.0

To support the rapid growth in use of seed treatments, we are increasing the training of our sales teams who, in turn, train growers in safe use. We seek to measure the effectiveness of our programs. For example, in Kenya we are currently running a pilot study to assess farmers' practices before and after training.

In the USA, we have been partnering with state and county administrations to support the delivery of publicly funded training programs affected by federal spending cuts. We have also been working to raise standards in the professional pest control industry – to which we are a major supplier – and to provide information for domestic pesticide users.

All chemicals should be handled with care, and personal protection equipment should be used to avoid harm. But, sometimes, the lack of caution or intended misuse can lead to adverse health incidents. Our toxicovigilance programs ensure that Syngenta has a robust and effective process for managing and reporting incidents of suspected poisoning. In 2012, 85 countries had a program in place, representing 92 percent of our crop protection sales.



“The long-term success of our company is based upon thriving rural communities and sustainable natural resources. Developing products to meet the challenges of the future and helping growers in the ongoing stewardship of their land is central to the way we do business.”


Michael Mack
Chief Executive Officer

Increasing sustainability and profitability

Responsible practices can increase value as well as sustainability. Over the past two years, we have been working with Kenyan and Colombian rose producers to win better access to US and European markets by improving processes, gaining certification to various NGO and Fairtrade standards, and meeting value chain requirements. In Thailand, we have helped growers to become the first smallholders certified by the Round Table on Sustainable Palm Oil; and elsewhere we have run residue management programs that enable smallholders to export their products for the first time.

Training is not the only way to improve practices. In Europe, we have taken a lead in sustainable intensification by linking farms into the Interra best-practice demonstration network. These farms are centers of expertise that keep neighboring farmers aware and informed. The network continued to grow in 2012 – with the addition of farms in Morocco and Hungary – and attracted some 600 visitors including farmers, students and policy makers.

In Colombia, a best-practice demonstration scheme has attracted more than 8,400 potato growers. It has helped them to increase productivity by 25–30 percent while reducing soil loss by 67 percent and water use by 25 percent. And crucially, average incomes have risen to \$1,000 a hectare. In 2012, we launched similar programs in Vietnam and the Philippines.

 See detailed “Responsible agriculture” and “Product safe use” performance data on [page 63](#)

Economic value shared

Syngenta generated revenues of \$14.2 billion in 2012. But the scale of our economic impact on society is considerably greater than this. In addition to our direct contribution to the global economy, we help millions of farmers in over 90 countries to improve their productivity, increase resource efficiency and earn a better living. Our products and support help them to create sustainable value and improve food security for many millions of people – see “Our contribution” on pages 10 to 15 for more on this.

The value we create benefits not only our shareholders. It also benefits the growers who work with us, our suppliers, our employees and the communities in which we invest.

Valuing our contribution

The nature of our work engages us deeply with communities around the world. Sharing knowledge, protecting the environment, promoting health and improving the quality of life are integral aspects of the way we work with them.



“At the same time as higher revenues enable us to grow, the economic value is shared in the communities in which we operate. Our financial performance reflects our ability to offer products that create value for our customers while ensuring the viability of their farms for generations to come.”

John Ramsay
Chief Financial Officer


We respond to concerns, contribute to local needs and try to develop long-term support for their prosperity. Our commitment to local communities is set out in the Syngenta Code of Conduct.

The full benefit of this support cannot easily be valued in cash terms. What we can do is report a figure for the cost of our community investment each year. This is calculated by totaling the value of cash, in-kind contributions and staff time spent on sponsorships, donations and community engagement programs. In 2012, our total community investment was valued at \$19 million.

Corporate community investment \$m

2010	17
2011	18
2012	19

For example, one of our long-running initiatives is Cultivando Solidaridad (“Growing solidarity”) in Argentina. Launched by local Syngenta employees to support rural communities hit by the country’s 2001 economic crisis, it is still one of our important employee volunteering programs. In the beginning, colleagues collected clothes, food and toys for hard-pressed families, and the scheme snowballed from there. Today, it focuses on schools, working with head teachers to improve children’s opportunities – for example, by developing vegetable gardens and supplying seeds so children can grow their own food. In 2012, Cultivando Solidaridad helped around 1,700 school children in 15 schools across 10 provinces.

 See detailed “Economic value shared” performance data on [page 64](#)

Business integrity

Syngenta has a formal, coordinated process for actively identifying, mapping, monitoring and controlling risks of all kinds. This process is underpinned by something less formal and more passionate: a fundamental conviction that business integrity drives shareholder value. We believe that doing the right thing is vital to being a sustainably successful business. And we seek to instill that view in everyone who works with us, as an employee or a supplier.

We comply with all local, national and international laws, codes and conventions, and uphold the principles set out in the Universal Declaration of Human Rights and the International Labor Organization’s Core Conventions.

Our Code of Conduct sets out clear ethical, environmental and social responsibilities that we expect all employees to take personally to heart. And we have clear whistleblowing procedures that encourage employees to report any suspected breaches. We also monitor our suppliers' compliance with our standards and external regulations on issues such as health and safety, the environment, fair labor practices and animal welfare.

A professional and holistic approach

In 2012, as part of the integration restructuring, we introduced a framework of Compliance and Risk Management Committees in all territories – mirroring the global governance structure with senior executive representation. The territory committees bring together top line managers such as Regional Directors with the leaders of Human Resources (HR), Finance, Legal, Syngenta Business Services, Production and Supply and Health, Safety and Environment, to ensure that we take a holistic view of compliance and risk.

Ultimate accountability for ethical and responsible business conduct rests with the line management of our businesses around the world. They are advised and supported by a team of compliance professionals. But our compliance model does not rely solely on top-down governance. We work hard to embed our Code of Conduct in our culture, so that doing the right thing is an instinctive part of our everyday behavior – a personal commitment from everyone, at every level.

We encourage employees to speak up and to report concerns directly to management, to our compliance functions including HR and Legal, or through our global, confidential compliance helpline. All concerns are followed up and investigated. In 2012, 58 cases were raised through the compliance helpline.

Compliance cases reported through the compliance helpline

2010	78
2011	82
2012	58

And when we make a multi-million dollar investment, such as the new \$85 million Russian production facility we announced in September 2012, we put compliance thinking in place from the outset.



“Behaving in an ethical and responsible manner is the foundation of our corporate reputation. Our people around the world are committed to upholding Syngenta’s Code of Conduct, and this is a key component of our company’s culture.”

Christoph Mäder
Head Legal and Taxes


For a project of this size, our approach covers a wide range of aspects including financial compliance, risk management, health and safety, environmental impacts, corporate responsibility, security and internal audit. Everyone working at the venture has been required to commit to our compliance framework, undertake personalized compliance training and earn certification from our compliance team. This is a precondition for employment on the project, for Syngenta and contractor employees alike.

Winning hearts and minds

Compliance is essentially about individuals embracing our principles without exception, so the training is designed not just to instruct but also to win hearts and minds. Workshops are highly interactive, using role play to root the principles in real life and help people experience how compliance can protect and guide them personally in their work.

Worldwide, in 2012, a large proportion of our compliance work focused on the more stringent policies introduced in 2011 relating to anti-bribery, anti-fraud and gifts and entertainment. While these policies have been cascaded to all employees worldwide, our approach has been risk-based so that we focus the greatest attention on the jobs and territories that are potentially most exposed to corruption.

All senior managers and all employees judged to be at risk have received face-to-face training with an interactive approach similar to the Russian compliance training described above. As with all other aspects of compliance and risk management, we believe a personalized approach is important in delivering the essence of our policies. No formal system of rules and regulation can cover all eventualities. Our goal is to foster a culture in which ethical behavior is the guiding principle in all our dealings, whatever the circumstances.

 See detailed “Business integrity” performance data on [page 64](#)

Board of Directors

at December 31, 2012



Martin Taylor

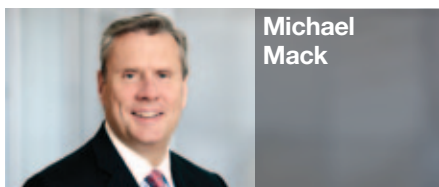
Chairman of the Board, non-executive Director. Chairman of the Chairman's Committee and the Corporate Responsibility Committee, and member of the Compensation Committee. He is also Chairman of the Syngenta Foundation for Sustainable Agriculture

Born: 1952. Nationality: British. Appointed: 2000. Term of office: 2013.

Martin Taylor will retire from his functions at Syngenta at the 2013 AGM for having reached the statutory limit of 12 years of office. He will be succeeded as Chairman of the Board of Syngenta by Michel Demaré, currently non-executive Director of the Board.

Martin Taylor is currently Vice Chairman of RTL Group SA. Previously he was an Advisor to Goldman Sachs International (1999–2005), Chairman of WHSmith plc (1999–2003), and Chief Executive Officer of Barclays plc (1993–1998) and Courtaulds Textiles (1990–1993). He recently served as a member of the British Government's Independent Banking Commission.

Martin Taylor has a degree in oriental languages from Oxford University.



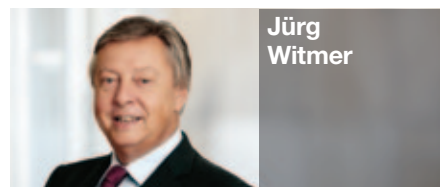
Michael Mack

Chief Executive Officer (CEO), executive Director. Member of the Chairman's Committee and the Corporate Responsibility Committee

Born: 1960. Nationality: American. Appointed: 2008. Term of office: 2013.

Michael Mack was Chief Operating Officer of Seeds (2004–2007) and Head of Crop Protection, NAFTA Region (2002–2004) for Syngenta. Prior to this, he was President of the Global Paper Division of Imerys SA, a French mining and pigments concern, from the time of its merger in 1999 with English China Clays Ltd., where he was Executive Vice President, Americas and Pacific Region, in addition to being an Executive Director of the Board. From 1987 to 1996 he held various roles with Mead Corporation. Michael Mack was Chairman and President of the Board of the Swiss-American Chamber of Commerce from 2009 to 2012.

Michael Mack has a degree in economics from Kalamazoo College in Michigan, studied at the University of Strasbourg, and has an MBA from Harvard University.



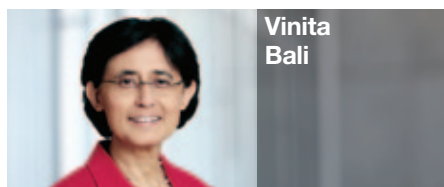
Jürg Witmer

Vice Chairman, non-executive Director. Member of the Chairman's Committee and of the Compensation Committee

Born: 1948. Nationality: Swiss. Appointed: 2006. Term of office: 2015.

Jürg Witmer is currently Chairman of Givaudan SA and a Director of Zuellig Group Hong Kong. Until March 2012, he was also Chairman of Clariant AG. He joined Roche (1978) in the legal department and subsequently held a number of positions including 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. Thereafter he became Chief Executive Officer of Givaudan Roure (1999) and then Chairman of the Board of Directors of Givaudan (2005).

Jürg Witmer has a doctorate in law from the University of Zurich, as well as a degree in international studies from the University of Geneva.



Vinita Bali

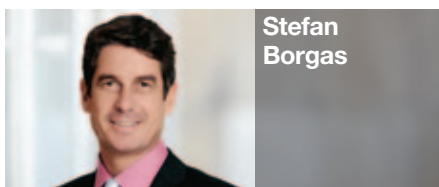
Non-executive Director. Member of the Corporate Responsibility Committee

Born: 1955. Nationality: Indian. Appointed: 2012. Term of office: 2014.

Vinita Bali has been Managing Director and Chief Executive Officer of Britannia Industries, India's public listed premier food company, since 2005. She also serves as a Director on the boards of Titan Industries, Piralma Glass, the Wadia Group Companies and GAIN (Global Alliance for Improved Nutrition).

She 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.

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



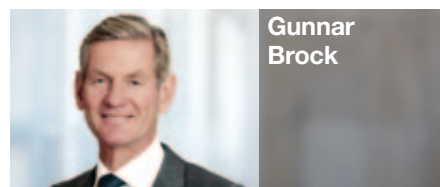
Stefan Borgas

Non-executive Director. Member of the Audit Committee

Born: 1964. Nationality: German. Appointed: 2009. Term of office: 2015.

Stefan Borgas is 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 also a member of the Board of the Swiss Management Gesellschaft (SMG).

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



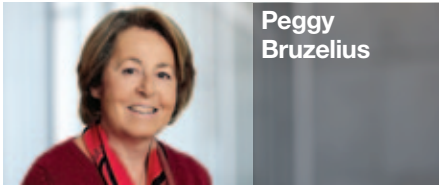
Gunnar Brock

Non-executive Director. Member of the Audit Committee

Born: 1950. Nationality: Swedish. Appointed: 2012. Term of office: 2014.

Gunnar Brock is Chairman of Stora Enso, Mölnlycke Health Care and Rolling Optics and a member of the Board of Investor AB, Total SA and Stena AB. He 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.

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



Peggy Bruzelius

Non-executive Director. Chairman of the Audit Committee

Born: 1949. Nationality: Swedish. Appointed: 2000. Term of office: 2013.

Peggy Bruzelius is currently Chairman of Lancelot Holding AB. In addition she serves as a Director of Akzo Nobel NV, Axfood AB, Diageo plc and Skandia Mutual Life Insurance AB. Peggy Bruzelius is a member of the Royal Swedish Academy of Engineering Sciences. Previously she was Vice Chairman of Electrolux AB (1996–2012), a Director of Husqvarna AB (2006–2012), Executive Vice President of SEB-bank (1997–1998) and Chief Executive Officer of ABB Financial Services (1991–1997).

Peggy Bruzelius holds a Master of Science from the Stockholm School of Economics and an Honorary Doctorate from the same university.



Michel Demaré

Non-executive Director. Member of the Chairman's Committee and of the Compensation Committee

Born: 1956. Nationality: Belgian. Appointed: 2012. Term of office: 2014.

Michel Demaré has handed in his resignation as CFO and Executive Vice President of ABB effective February 1, 2013, in order to focus on his Board responsibilities. He will succeed Martin Taylor as Chairman of the Board of Syngenta as of the 2013 Annual General Meeting.

Michel Demaré has been Chief Financial Officer of ABB since 2005, 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 in the Dow Chemical Company, where he held various treasury and business Chief Financial Officer positions in Europe (including Switzerland) and the US. He is Vice Chairman of the Board of UBS, a member of the Board Committee of SwissHoldings and a member of the IMD Foundation Board in Lausanne.

Michel Demaré has an MBA from the Katholieke Universiteit at Leuven.



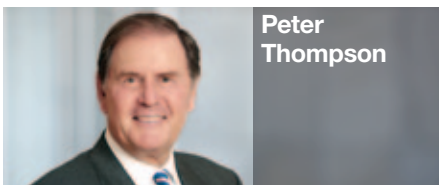
David Lawrence

Non-executive Director. Member of the Corporate Responsibility Committee and Chairman of the Science and Technology Advisory Board

Born: 1949. Nationality: British. Appointed: 2009. Term of office: 2015.

David Lawrence was Head Research & Development at Syngenta from September 1, 2002 until the end of September, 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. He was a member of the UK Foresight Lead Expert Group on Food and Farming. Currently he is a member of the BBSRC Council and of the UK Industrial Biotechnology Leadership Team. He is also a Board member for Rothamsted Research, Chairman of the UK Biosciences Knowledge Transfer Network Board, and a member of the World Economic Forum Biotechnology Council.

David Lawrence graduated in chemistry from Oxford University with an MA and DPhil in chemical pharmacology.



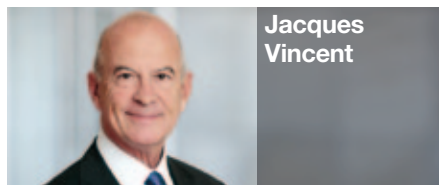
Peter Thompson

Non-executive Director. Member of the Audit Committee

Born: 1946. Nationality: American. Appointed: 2000. Term of office: 2013.

Peter Thompson is currently a Director of Sodexo SA. Previously he was President and Chief Executive Officer of PepsiCo Beverages International (1996–2004), President of PepsiCo Foods International's Europe, Middle East and Africa Division (1995–1996) and of Walkers Snack Foods in the UK (1994–1995). Before joining PepsiCo he held various senior management roles with Grand Metropolitan plc, including President and Chief Executive Officer of GrandMet Foods Europe (1992–1994), Vice Chairman of The Pillsbury Company (1990–1992), and President and Chief Executive Officer of The Paddington Corporation (1984–1990). He is also Chairman of the Vero Beach Museum of Art.

Peter Thompson has a degree in modern languages from Oxford University and an MBA from Columbia University.

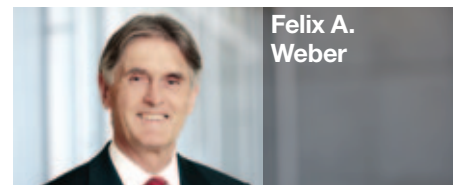


Jacques Vincent

Non-executive Director. Member of the Compensation Committee

Born: 1946. Nationality: French. Appointed: 2005. Term of office: 2013.

Jacques Vincent has been Vice Chairman and Chief Operating Officer of the Danone Group, Paris, from 1998 until 2008. Since 2010 he has been sitting on the board of various companies, among them Danone, Cereplast and Mediaperformance. He began his career with Danone in 1970 and has since held various financial and overall management positions within this group. 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.



Felix A. Weber

Non-executive Director. Chairman of the Compensation Committee

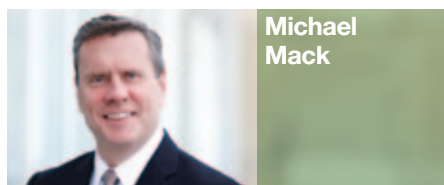
Born: 1950. Nationality: Swiss. Appointed: 2000. Term of office: 2013.

Felix A. Weber is currently Executive Committee Co-Chairman of Nomura Switzerland, a Managing Director of Nomura International Ltd. and Chairman of Nomura Insurance Holdings AG. Previously, he was a Director of Publigroupe (2005–2009), a Director of Valora (2006–2008), a Director of Glacier Holdings GP SA and Glacier Holdings S.C.A (former parent entities of Cablecom GmbH) (2003–2005), a Director of Cablecom GmbH (2004–2005), Managing Director of Lehman Brothers Ltd. (2006–2008), Executive Vice President and Chief Financial Officer of Adecco SA (1998–2004), Associate Project Manager and Principal of McKinsey & Company in Zurich (1989–1997), and Chief Executive Officer of Aluisse South Africa (1982–1984).

Felix A. Weber graduated from the University of St. Gallen with an MBA in operations research and finance and a PhD in marketing.

Executive Committee

at December 31, 2012



Michael Mack

Chief Executive Officer (CEO), executive Director. Member of the Chairman's Committee and the Corporate Responsibility Committee

Born: 1960. Nationality: American. Appointed: 2008. Term of office: 2013.

Michael Mack was Chief Operating Officer of Seeds (2004–2007) and Head of Crop Protection, NAFTA Region (2002–2004) for Syngenta. Prior to this, he was President of the Global Paper Division of Imerys SA, a French mining and pigments concern, from the time of its merger in 1999 with English China Clays Ltd., where he was Executive Vice President, Americas and Pacific Region, in addition to being an Executive Director of the Board. From 1987 to 1996 he held various roles with Mead Corporation. Michael Mack was Chairman and President of the Board of the Swiss-American Chamber of Commerce from 2009 to 2012.

Michael Mack has a degree in economics from Kalamazoo College in Michigan, studied at the University of Strasbourg, and has an MBA from Harvard University.



John Atkin

Chief Operating Officer

Born: 1953. Nationality: British. Appointed: 2000.

Prior to his current role as Chief Operating Officer Syngenta, John Atkin was Chief Operating Officer for Syngenta Crop Protection, from the foundation of the Company in 2000 until February 2011. Before that, he was Chief Executive Officer (1999–2000), Chief Operating Officer (1999), Head of Product Portfolio Management (1998), and Head of Insecticides and Patron for Asia (1997–1998) of Novartis Crop Protection. Prior to 1998, he was General Manager of Sandoz Agro France (1995–1997) and Head of Sandoz Agro Northern Europe (1993–1995). In 2008 he was appointed Visiting Professor at the Institute for Research on Environment and Sustainability (IRES) at the University of Newcastle upon Tyne. He was appointed as a non-executive Director of Driscoll's in 2011.

He graduated from the University of Newcastle upon Tyne with a PhD and a BSc degree in agricultural zoology.



Robert Berendes

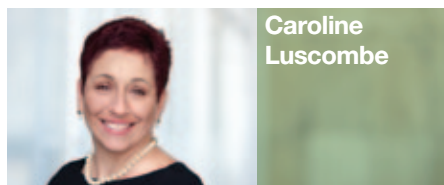
Head Business Development

Born: 1965. Nationality: German. Appointed: 2007.

In addition to his responsibilities, Robert Berendes assumed an interim leadership for Syngenta's Research & Development on October 22, 2012, until a successor is appointed.

Robert Berendes was Head of Diverse Field Crops (2005–2006) and Head of Strategy, Planning and M&A (2002–2005) for Syngenta. Prior to this, he was a partner and co-leader of the European chemical practice at McKinsey & Company.

He graduated from the University of Cologne with a diploma in chemistry and has a PhD in biophysics from the Max-Planck-Institute for Biochemistry/Technical University of Munich.



Caroline Luscombe

Head Human Resources

Born: 1960. Nationality: British. Appointed: 2012.

Caroline Luscombe joined Syngenta as Head Human Resources in January 2010. Prior to this, she held several senior human resources (HR) roles 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 roles 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).

She holds a bachelor's degree in German from University College, London.



Christoph Mäder

Head Legal & Taxes and Company Secretary

Born: 1959. Nationality: Swiss. Appointed: 2000.

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 Chairman of scienceindustries, the association of Swiss chemical, pharmaceutical and biotech industries. He is also a Vice Chairman of economiesuisse, the main umbrella organization representing Swiss economy, 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).

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



Mark Peacock

Head Global Operations

Born: 1961. Nationality: British. Appointed: 2007.

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.

He has a degree in chemical engineering from Imperial College, London, and a Masters in international management from McGill University in Montreal.



Chief Operating Officer

Born: 1958. Nationality: British.
Appointed: 2008.

Prior to his current role 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).

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



Chief Financial Officer

Born: 1957. Nationality: British.
Appointed: 2007.

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.

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



In memory of Alejandro Aruffo
1959 – 2013

We were deeply saddened by the loss of Dr. Alejandro Aruffo, Head Research & Development and a member of the Syngenta Executive Committee.

Having completed his studies at the University of Washington and Harvard, Dr. Aruffo pursued a highly successful career in pharmaceutical research at Bristol-Myers Squibb and Abbott.

On joining Syngenta in 2008, Dr. Aruffo assumed global responsibility for the company's combined chemical and biological research and development. With his broad leadership experience and advanced analytical and strategic capabilities, he made an enduring contribution to strengthening innovation at Syngenta.

The Board, the Executive Committee and employees owe a lasting debt of gratitude to Dr. Aruffo. We have lost a remarkable personality and a good friend.

We honor the memory of Dr. Aruffo, and our heartfelt sympathy goes to his wife Linda and his two children.

Product line performance

Crop Protection

Selective herbicides

Major brands: AXIAL[®], CALLISTO[®] family, DUAL[®]/BICEP[®] MAGNUM, FUSILADE[®]MAX, TOPIK[®]

AXIAL[®] on cereals registered double digit growth in all regions. The largest contribution came from Canada, where increased acreage coincided with low channel inventories at the start of the year. In corn, the CALLISTO[®] family and DUAL[®]/BICEP[®] grew strongly in the USA driven by their success in managing resistant weeds as well as high corn prices. Adoption of both products on sugar cane in Brazil, where they form part of integrated agronomic protocols, is accelerating rapidly.

Non-selective herbicides

Major brands: GRAMOXONE[®], TOUCHDOWN[®]

GRAMOXONE[®] showed good growth in Latin America and the USA, where it was used as an alternative to glyphosate in areas of weed resistance. Sales in the developed markets of Asia Pacific were lower, partly due to non-renewal of the registration in South Korea. TOUCHDOWN[®] sales grew strongly, notably in the Americas, reflecting a high level of demand on corn and soybean and a shortage of generic supply.

Fungicides

Major brands: ALTO[®], AMISTAR[®], BRAVO[®], REVUS[®], RIDOMIL GOLD[®], SCORE[®], TILT[®], UNIX[®]

Fungicide sales progressed despite drought in Latin America in the first quarter and in the USA throughout the summer. The largest product, AMISTAR[®], continues to expand: volume growth was driven by our offer comprising multiple mixtures and formulations adapted by crop and geography, and pricing remained robust. Sales of REVUS[®] for vegetables, vines and potatoes were up by 25 percent¹ in Europe, its main market. In November, the European Union granted full approval for isopyrazam, which will represent a major step forward in the control of a wide variety of damaging fungal diseases.

Insecticides

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

Excluding the impact of range rationalization, sales were up 10 percent,¹ led by the Americas. In the USA, a mild winter and dry weather throughout the corn belt created heavy early insect pressure. In addition, grower awareness of corn rootworm resistance and of the benefits of soil-based insecticides increased, with North American sales of FORCE[®] more than doubling as a result. Latin American growth was driven by technology adoption, with the strongest contributions coming from ACTARA[®] and DURIVO[®].

Seed care

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

Global growth was led by CRUISER[®] and CELEST[®]/MAXIM[®]. Ongoing technology adoption drove a particularly strong performance in the emerging markets, where sales were up by over 20 percent.¹ In Latin America, the nematocide AVICTA[®] also showed strong growth. VIBRANCE[®], a new compound that delivers enhanced root health as well as controlling a wide range of diseases, was successfully launched in North America.

Seeds

Corn and soybean

Major brands: AGRISURE[®], GARST[®], GOLDEN HARVEST[®], NK[®]

Sales were up strongly in all regions driven by corn worldwide and by soybean in Latin America. North American sales were augmented by additional corn trait royalty income of around \$200 million received in the first half; excluding this amount, global corn sales were up 15 percent, with a positive customer response to our broad technology offer. In Latin America, corn growth was driven by the expansion of the second season in Brazil, where sales were up by more than 30 percent helped by the launch of new trait combinations. Increases in soybean acreage for the 2012/13 season have been accompanied by strong demand for our leading varieties such as V-Max. The integrated PLENUS[®] offer is growing well in Argentina where it now accounts for around three-quarters of the portfolio.

Diverse field crops

Major brands: NK[®] oilseeds, HILLESHÖG[®] sugar beet

Growth was led by sunflower in Eastern Europe where we are capturing value from the expansion of our leading conventional and high oleic hybrids. In North America, growth in sunflower and cereals more than offset the disposal of the sorghum business. Hybrid barley is starting to make a significant contribution in major Western European countries, alongside growth in the existing wheat business.

Vegetables

Major brands: DULCINEA[®], ROGERS[®], S&G[®]

There was an upturn in the fourth quarter that offset the earlier impact of a difficult economic environment. In North America, the processing market has recovered from a period of oversupply, and fresh produce sales are benefiting from strong demand for miniature watermelons. In Mexico and Iberia, Zeraim's leading tomato and pepper varieties are driving sales.

¹ At constant exchange rates

Crop Protection sales¹

Selective herbicides

\$m

2010	2,308
2011	2,617
2012	2,939

Non-selective herbicides

\$m

2010	987
2011	1,117
2012	1,246

Fungicides

\$m

2010	2,662
2011	2,998
2012	3,044

Insecticides

\$m

2010	1,475
2011	1,790
2012	1,841

Seed care

\$m

2010	838
2011	1,018
2012	1,107

Seeds sales

Corn and soybean

\$m

2010	1,292
2011	1,471
2012	1,836

Diverse field crops

\$m

2010	524
2011	676
2012	719

Vegetables

\$m

2010	663
2011	703
2012	682

¹ Includes sales of Crop Protection products to Seeds and excludes non-product line sales

Financial information

A summary of Syngenta's consolidated financial statements is provided on pages 52 to 59. For full details and analysis of the Group's audited financial results, prepared in accordance with IFRS, please refer to our comprehensive Financial Report 2012, which is available on request or on our website www.syngenta.com/ar2012

References to EBITDA in the following financial information excludes the impact of restructuring, impairment and discontinued operations.¹

Summarized financial information 2012 and 2011

Year ended December 31 (\$m, except per share amounts)	Excluding restructuring and impairment ¹		Restructuring and impairment		As reported under IFRS	
	2012	2011	2012	2011	2012	2011
Sales	14,202	13,268	–	–	14,202	13,268
Gross profit	6,991	6,496	(7)	(14)	6,984	6,482
Marketing and distribution	(2,418)	(2,387)	–	–	(2,418)	(2,387)
Research and development	(1,253)	(1,191)	–	–	(1,253)	(1,191)
General and administrative	(763)	(622)	(258)	(231)	(1,021)	(853)
Operating income	2,557	2,296	(265)	(245)	2,292	2,051
Income before taxes	2,417	2,146	(265)	(245)	2,152	1,901
Income tax expense	(360)	(356)	83	55	(277)	(301)
Net income	2,057	1,790	(182)	(190)	1,875	1,600
Attributable to non-controlling interests	(3)	(1)	–	–	(3)	(1)
Attributable to Syngenta AG shareholders:	2,054	1,789	(182)	(190)	1,872	1,599
Earnings/(loss) per share (\$)²						
Basic	22.41	19.47	(1.98)	(2.07)	20.43	17.40
Diluted	22.30	19.36	(1.98)	(2.05)	20.32	17.31
	2012	2011	2012			
Gross profit margin excluding restructuring and impairment	49.2%	49.0%	49.3%			
EBITDA⁴	3,150	2,905				
EBITDA margin	22.2%	21.9%	23.2%			
Tax rate on results excluding restructuring and impairment	15%	17%				
Free cash flow⁵	270	1,537				
Trade working capital to sales⁶	32%	30%				
Debt/Equity gearing⁷	20%	15%				
Net debt⁷	1,706	1,135				
Cash flow return on investment⁸	15%	14%				

¹ For further discussion of restructuring and impairment charges, see page 58. Net income and earnings per share excluding restructuring and impairment are provided as additional information and not as an alternative to net income and earnings per share determined in accordance with IFRS

² The weighted average number of ordinary shares in issue used to calculate the earnings per share were as follows: For 2012 basic EPS 91,644,190 and diluted 92,132,922; for 2011 basic EPS 91,892,275 and diluted 92,383,611

³ For a description of CER, see page 58

⁴ EBITDA is defined on page 58

⁵ For a description of free cash flow, see page 58

⁶ Period end trade working capital as a percentage of twelve-month sales

⁷ For a description of net debt and the calculation of debt/equity gearing, see page 58

⁸ For a description of the cash flow return on investment calculation, see page 58

Full year sales

Year ended December 31	2012 \$m	2011 \$m	Actual %	CER %
Group sales				
Europe, Africa and Middle East	3,974	3,982	-	+6
North America	3,931	3,273	+20	+21
Latin America	3,713	3,305	+12	+13
Asia Pacific	1,827	1,887	-3	-
Total regional sales	13,445	12,447	+8	+11
Lawn and Garden ¹	757	821	-8	-6
Group sales	14,202	13,268	+7	+10

Crop Protection by region

Europe, Africa and Middle East	2,910	2,958	-2	+5
North America	2,577	2,158	+19	+20
Latin America	3,261	2,907	+12	+13
Asia Pacific	1,570	1,654	-5	-2
Total	10,318	9,677	+7	+9

Seeds by region

Europe, Africa and Middle East	1,101	1,063	+4	+10
North America	1,398	1,142	+22	+22
Latin America	479	409	+17	+18
Asia Pacific	259	236	+10	+16
Total	3,237	2,850	+14	+16

Sales by business

Crop Protection	10,318	9,677	+7	+9
Seeds	3,237	2,850	+14	+16
<i>Elimination of Crop Protection sales to Seeds</i>	<i>(110)</i>	<i>(80)</i>	<i>n/a</i>	<i>n/a</i>
Total regional sales	13,445	12,447	+8	+11
Lawn and Garden ¹	757	821	-8	-6
Group sales	14,202	13,268	+7	+10

1 Includes product lines Professional Products and Flowers. Professional Products were formerly reported under Crop Protection and Flowers under Seeds

Full year product line sales

Year ended December 31	2012 \$m	2011 \$m	Actual %	CER %
Selective herbicides	2,939	2,617	+12	+15
Non-selective herbicides	1,246	1,117	+12	+14
Fungicides	3,044	2,998	+2	+4
Insecticides	1,841	1,790	+3	+6
Seed care	1,107	1,018	+9	+12
Other crop protection	141	137	+2	+5
Total Crop Protection	10,318	9,677	+7	+9
Corn and soybean	1,836	1,471	+25	+26
Diverse field crops	719	676	+6	+11
Vegetables	682	703	-3	+1
Total Seeds	3,237	2,850	+14	+16
<i>Elimination of Crop Protection sales to Seeds</i>	<i>(110)</i>	<i>(80)</i>	<i>n/a</i>	<i>n/a</i>
Lawn and Garden ¹	757	821	-8	-6
Group sales	14,202	13,268	+7	+10

1 Includes product lines Professional Products and Flowers. Professional Products were formerly reported under Crop Protection and Flowers under Seeds

Condensed consolidated income statement

Year ended December 31 (\$m, except share and per share amounts)	2012	2011
Sales	14,202	13,268
Cost of goods sold	(7,218)	(6,786)
Gross profit	6,984	6,482
Marketing and distribution	(2,418)	(2,387)
Research and development	(1,253)	(1,191)
General and administrative:		
Restructuring	(233)	(307)
Divestment gains/(losses)	(25)	76
Other general and administrative	(763)	(622)
Operating income	2,292	2,051
Income from associates and joint ventures	7	15
Financial expenses, net	(147)	(165)
Income before taxes	2,152	1,901
Income tax expense	(277)	(301)
Net income	1,875	1,600
Attributable to:		
Syngenta AG shareholders	1,872	1,599
Non-controlling interests	3	1
Net income	1,875	1,600
Earnings per share (\$):		
Basic	20.43	17.40
Diluted	20.32	17.31
Weighted average number of shares:		
Basic	91,644,190	91,892,275
Diluted	92,132,922	92,383,611

All activities were in respect of continuing operations.

Restructuring and impairment before taxes

Year ended December 31 (\$m)	2012	2011
Operational efficiency programs:		
Cash costs	55	98
Non-cash impairment costs	2	3
Integrated crop strategy programs:		
Cash costs	102	149
Acquisition and related integration costs:		
Cash costs	18	14
Non-cash items		
Reversal of inventory step-ups	7	14
Reacquired rights	14	14
Divestment losses/(gains)	25	(76)
Bargain purchase gains	-	(10)
Other non-cash restructuring and impairment:		
Non-current asset impairments	42	39
Total restructuring and impairment before taxes¹	265	245

¹ \$7 million (2011: \$14 million) is included within Cost of goods sold

Condensed consolidated balance sheet

At December 31 (\$m)	2012	2011
Assets		
Current assets:		
Cash and cash equivalents	1,599	1,666
Trade receivables	3,191	2,736
Other accounts receivable	932	690
Inventories	4,734	4,190
Derivative and other financial assets	251	269
Other current assets	257	199
Total current assets	10,964	9,750
Non-current assets:		
Property, plant and equipment	3,193	3,025
Intangible assets	3,501	2,869
Deferred tax assets	1,075	930
Financial and other non-current assets	668	667
Total non-current assets	8,437	7,491
Total assets	19,401	17,241
Liabilities and equity		
Current liabilities:		
Trade accounts payable	(3,409)	(2,881)
Current financial debt and other financial liabilities	(1,048)	(955)
Income taxes payable	(574)	(547)
Other current liabilities	(1,160)	(1,028)
Provisions	(236)	(232)
Total current liabilities	(6,427)	(5,643)
Non-current liabilities:		
Financial debt and other non-current liabilities	(2,514)	(2,374)
Deferred tax liabilities	(863)	(753)
Provisions	(841)	(968)
Total non-current liabilities	(4,218)	(4,095)
Total liabilities	(10,645)	(9,738)
Equity:		
Shareholders' equity	(8,745)	(7,494)
Non-controlling interests	(11)	(9)
Total equity	(8,756)	(7,503)
Total liabilities and equity	(19,401)	(17,241)

Condensed consolidated cash flow statement

Year ended December 31 (\$m)	2012	2011
Income before taxes	2,152	1,901
Reversal of non-cash items	984	801
Cash (paid)/received in respect of:		
Interest and other financial receipts	197	312
Interest and other financial payments	(422)	(426)
Income taxes	(378)	(282)
Restructuring costs	(55)	(71)
Contributions to pension plans, excluding restructuring costs	(78)	(198)
Other provisions	(182)	(116)
Cash flow before change in net working capital	2,218	1,921
Change in net working capital:		
Change in inventories	(555)	(478)
Change in trade and other working capital assets	(814)	(120)
Change in trade and other working capital liabilities	510	548
Cash flow from operating activities	1,359	1,871
Additions to property, plant and equipment	(508)	(479)
Proceeds from disposals of property, plant and equipment	30	20
Purchases of intangible assets	(112)	(62)
Purchases of investments in associates and other financial assets	(59)	(34)
Proceeds from disposals of intangible and financial assets	21	22
Cash flow from (purchases)/disposals of marketable securities, net	(8)	11
Acquisitions and divestments, net	(582)	50
Cash flow used for investing activities	(1,218)	(472)
Increases in third party interest-bearing debt	1,256	305
Repayments of third party interest-bearing debt	(721)	(906)
(Purchases)/sales of treasury shares and options over own shares, net	24	(377)
Distributions paid to shareholders	(791)	(706)
Cash flow used for financing activities	(232)	(1,684)
Net effect of currency translation on cash and cash equivalents	24	(16)
Net change in cash and cash equivalents	(67)	(301)
Cash and cash equivalents at the beginning of the year	1,666	1,967
Cash and cash equivalents at the end of the year	1,599	1,666

Free cash flow

Year ended December 31 (\$m)	2012	2011
Cash flow from operating activities	1,359	1,871
Cash flow used for investing activities	(1,218)	(472)
Cash flow from marketable securities	8	(11)
Cash flow used for acquisitions of non-controlling interests	–	–
Cash flow used for/(from) foreign exchange movements and settlement of hedges of inter-company loans	121	149
Free cash flow	270	1,537

Constant exchange rates (CER)

Results in this report from one period to another period are, where appropriate, compared using 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 at the exchange rates for the current year. CER margin percentages for gross profit and EBITDA are calculated by the ratio of these measures to sales after restating the measures and sales at prior period exchange rates. The CER presentation indicates the underlying business performance before taking into account currency exchange fluctuations.

EBITDA

EBITDA is defined as earnings before interest, tax, minority interests, depreciation, amortization, restructuring and impairment. Information concerning EBITDA has been included as it is used by management and by investors as a supplementary measure of operating performance. Management excludes restructuring from EBITDA in order to focus on results excluding items affecting comparability from one period to the next. EBITDA is not a measure of cash liquidity or financial performance under generally accepted accounting principles and the EBITDA measures used by Syngenta may not be comparable to other similarly titled measures of other companies. EBITDA should not be construed as an alternative to operating income or cash flow as determined in accordance with generally accepted accounting principles.

Restructuring and impairment before taxes

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 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.

Free cash flow

Free cash flow comprises cash flow from operating and investing activities: excluding investments in and proceeds from marketable securities, which are included in investing activities; excluding cash flows from and used for foreign exchange movements and settlement of related hedges on inter-company loans, which are included in operating activities; and including cash flows from acquisitions of non-controlling interests, which are included in financing activities.

Free cash flow is not a measure of financial performance under generally accepted accounting principles and the free cash flow measure used by Syngenta may not be identical to similarly titled measures of other companies. Free cash flow has been included as it is used by many investors as a useful supplementary measure of cash generation.

Net debt reconciliation

Net debt comprises total debt net of related hedging derivatives, cash and cash equivalents and marketable securities. Net debt is not a measure of financial position under generally accepted accounting principles and the net debt measure used by Syngenta may not be comparable to the similarly titled measure of other companies. Net debt has been included as it is used by many investors as a useful measure of financial position and risk. The following table presents the derivation of the debt/equity gearing ratio:

(\$m)	2012	2011
Net debt	1,706	1,135
Shareholders' equity	8,745	7,494
Debt/equity gearing ratio (%)	20%	15%

Cash flow return on investment

Cash flow return on investment is a measure used by Syngenta to compare cash returns to average invested capital. Gross cash flow used in the calculation comprises cash flow before change in net working capital, excluding interest and other financial receipts and payments. In 2011, accelerated contributions to the defined benefit pension plans were also excluded. Invested capital comprises: total current assets, excluding cash and derivative and other financial assets; total non-current assets, excluding non-current derivative and other financial assets and defined benefit pension assets, and adjusted to reflect the gross book values of property, plant and equipment and intangible assets; total current liabilities, excluding current financial debt and other financial liabilities; and deferred tax liabilities.

Full year segmental results excluding restructuring and impairment

2012 (\$m)	EAME ¹	North America	Latin America	Asia Pacific	Non-regional	Total regional ²	Lawn and Garden	Total Group
Sales	3,974	3,931	3,713	1,827	–	13,445	757	14,202
Cost of goods sold	(1,859)	(1,805)	(2,057)	(973)	(149)	(6,843)	(368)	(7,211)
Gross profit	2,115	2,126	1,656	854	(149)	6,602	389	6,991
Marketing and distribution	(664)	(602)	(546)	(303)	(95)	(2,210)	(208)	(2,418)
Research and development	–	–	–	–	(1,195)	(1,195)	(58)	(1,253)
General and administrative	(146)	(153)	(103)	(46)	(270)	(718)	(45)	(763)
Operating income/(loss)	1,305	1,371	1,007	505	(1,709)	2,479	78	2,557

2011 ³ (\$m)	EAME ¹	North America	Latin America	Asia Pacific	Non-regional	Total regional ²	Lawn and Garden	Total Group
Sales	3,982	3,273	3,305	1,887	–	12,447	821	13,268
Cost of goods sold	(1,798)	(1,642)	(1,813)	(984)	(131)	(6,368)	(404)	(6,772)
Gross profit	2,184	1,631	1,492	903	(131)	6,079	417	6,496
Marketing and distribution	(685)	(554)	(542)	(290)	(89)	(2,160)	(227)	(2,387)
Research and development	–	–	–	–	(1,135)	(1,135)	(56)	(1,191)
General and administrative	(166)	(114)	(77)	(48)	(155)	(560)	(62)	(622)
Operating income/(loss)	1,333	963	873	565	(1,510)	2,224	72	2,296

1 EAME: Europe, Africa and Middle East

2 Includes non-regional

3 After the effect of reclassifications described in Note 2 to the Group Consolidated Financial Statements in the Financial Report 2012
All activities were in respect of continuing operations.

Segmental operating income reconciled to segmental results excluding restructuring and impairment

2012 (\$m)	EAME ¹	North America	Latin America	Asia Pacific	Non-regional	Total regional ²	Lawn and Garden	Total Group
Operating income/(loss)	1,275	1,342	970	493	(1,828)	2,252	40	2,292
Restructuring and impairment:								
Cost of goods sold ³	5	2	–	–	–	7	–	7
Expenses	25	27	37	12	119	220	38	258
Operating income excluding restructuring and impairment	1,305	1,371	1,007	505	(1,709)	2,479	78	2,557
Operating margin (%)	32.8	34.9	27.1	27.6	n/a	18.4	10.4	18.0

2011 (\$m)	EAME ¹	North America	Latin America	Asia Pacific	Non-regional	Total regional ²	Lawn and Garden	Total Group
Operating income/(loss)	1,237	932	850	552	(1,539)	2,032	19	2,051
Restructuring and impairment:								
Cost of goods sold ³	8	6	–	–	–	14	–	14
Expenses	88	25	23	13	29	178	53	231
Operating income excluding restructuring and impairment	1,333	963	873	565	(1,510)	2,224	72	2,296
Operating margin (%)	33.5	29.4	26.4	29.9	n/a	17.9	8.8	17.3

1 EAME: Europe, Africa and Middle East

2 Includes non-regional

3 Reversal of inventory step-up

Corporate Responsibility performance summary

Corporate Responsibility (CR) is integral to our business and our reporting. Syngenta's CR performance is covered throughout this Annual Review and summarized on pages 60 to 64. CR performance data is presented in seven categories that align with the way we work: people, manufacturing and procurement, environment, responsible agriculture, product safe use, economic value shared and business integrity. Our CR reporting is for the period October 1 to September 30, with the exceptions noted. In 2012, we made improvements to our CR reporting processes, revised some CR performance indicators, and added a number of new indicators. For more information on our CR performance in 2012, including a detailed explanation of the figures presented below, see the Online Annual Report: www.syngenta.com/ar2012

People

	2012	2011	2010
People retention¹			
Employees ²	27,262	26,333	26,302
EAME ³	12,417	12,134	12,509
North America	4,598	4,713	4,809
LATAM	5,095	4,681	4,282
APAC	5,152	4,805	4,702
Part-time employees	975	881	850
Turnover rate ⁴	12.4%	11.6%	9.5%
Diversity¹			
Female employees	31%	32%	32%
In management roles	20%	21%	20%
In senior management	13%	12%	11%
Senior managers	334	345	196
EAME ³	63%	62%	63%
North America	19%	19%	18%
LATAM	10%	10%	9%
APAC	8%	9%	10%
Nationalities in senior management	38	34	24
Employee development^{1, 5}			
Training investment (\$m)	24.6	23.7	19.5
Training investment per employee (\$)	901	901	741
Reward and recognition¹			
Employees eligible to participate in Employee Share Purchase Plan (ESPP)	16,561	16,872	16,262
Eligible employees participating in ESPP	46%	46%	46%
Employees participating in long-term equity incentive plans	1,098	1,047	1,031

¹ In 2012, reporting year ending September 30. In 2011 and 2010, reporting year ending December 31

² Permanent full-time equivalent (FTE)

³ Including headquarters (Switzerland)

⁴ Including voluntary leavers, retirees and restructuring

⁵ Restated values due to change in scope to include only training delivered by external providers

People continued

Health, safety and wellbeing	2012	2011	2010
Recordable injury and illness rate (IIR) per 200,000 hours ¹	0.39	0.44	0.41
Recordable injury rate per 200,000 hours ¹	0.35	0.39	0.39
EAME ²	0.39	0.38	0.43
North America	0.87	0.99	0.75
LATAM	0.17	0.20	0.22
APAC	0.16	0.17	0.18
Recordable occupational illness rate per 200,000 hours ¹	0.03	0.05	0.02
EAME ²	0.07	0.05	0.01
North America	0.00	0.16	0.06
LATAM	0.00	0.00	0.00
APAC	0.03	0.01	0.01
First aid cases	693	798	820

1 According to US OSHA definition for injuries and illness

2 Including headquarters (Switzerland)

 Read more about "People" on www.syngenta.com/ar2012

Manufacturing and procurement

Responsible supply chain ¹	2012	2011	2010
Seed supply farms included in Syngenta/FLA program	17,625	16,880	11,886
HSEQ assessments at chemical suppliers ²	109	97	70
HSEQ assessments at warehouse/logistics service providers ³	115	129	–

New indicators for 2012

Our production and R&D sites ^{4, 5}	2012
Active ingredient production	8
Formulation, fill and packaging	23
Lawn and Garden supply chain	15
Seed processing	62
Research and development	154
Quality management ^{4, 6}	
Quality audits performed on own sites	91
Quality audits performed on third parties	89
Security management ⁴	
Evaluated high and medium risk sites	72
Of which: production sites	39%

1 In 2012, reporting year ending September 30. In 2011 and 2010, reporting year ending December 31

2 Formulation, fill and packaging supplier assessments have been included since 2011

3 2011 first year of reporting

4 2012 first year of reporting

5 Including 35 multi-functional sites

6 Reporting year ending December 31

 Read more about "Manufacturing and procurement" on www.syngenta.com/ar2012

Environment

	2012	2011	2010
Energy			
Energy intensity (MJ/\$EBIT)¹	3.65	3.79	4.08
Energy (TJ)	9,336	8,707	8,031
Gas (TJ)	3,936	3,655	3,851
Electricity (TJ)	2,347	2,155	1,963
Steam (TJ)	1,419	1,438	935
Oil (TJ)	703	660	631
Others (TJ)	931	799	652
Sites setting energy targets	19	19	22
Greenhouse gases			
Total CO₂e emissions intensity (kg/\$EBIT)¹	0.59	0.61	0.66
Total CO ₂ e emissions (000s tonnes)	1,516	1,396	1,304
Within direct control:			
CO ₂ e emissions from own operations (000s tonnes)	665	513	616
CO ₂ emissions from company vehicles (000s tonnes)	68	65	68
Within indirect control:			
CO ₂ e emissions from purchased energy (000s tonnes)	391	374	301
CO ₂ emissions from business trips (000s tonnes)	45	51	20
CO ₂ emissions from distribution (000s tonnes)	347	393	299
Other air emissions			
Other air emissions intensity (g/\$EBIT)¹	0.52	0.63	0.64
Other air emissions (tonnes)	1,324	1,454	1,269
NO _x (tonnes)	476	445	404
Non-halogenated VOCs (tonnes)	505	647	440
Halogenated VOCs (tonnes)	13	29	48
Particulates (tonnes)	108	114	123
SO ₂ (tonnes)	198	180	208
NH ₃ (tonnes)	8	22	23
HCL (tonnes)	16	17	23
Water			
Water usage intensity (liters/\$EBIT)¹	13.2	13.4	14.6
Water usage (million cubic meters)	33.8	30.8	28.8
Cooling (million cubic meters)	18.0	18.7	18.6
Irrigation (million cubic meters) ²	6.5	2.9	1.8
Processing and washing (million cubic meters) ³	7.0	7.0	6.2
Product ingredient (million cubic meters)	0.2	0.2	0.2
Sewage and sanitary (million cubic meters)	1.0	1.0	1.1
Others (million cubic meters)	1.1	1.0	0.9
Wastewater effluents			
Industrial wastewater discharge intensity (liters/\$EBIT)¹	3.9	4.2	4.5
Industrial wastewater discharge (million cubic meters)	10.1	9.6	8.8
Total organic carbon (TOC) (tonnes)	771	1,033	769
Chemical oxygen demand (COD) (tonnes)	2,337	3,119	2,336
Biological oxygen demand (BOD) (tonnes)	239	308	240
Total suspended solids (tonnes)	363	520	393
Soluble salts discharged (000s tonnes)	133	120	114
Direct discharge of uncontaminated cooling water (million cubic meters)	17.8	18.5	18.5

1 \$EBIT excluding restructuring and impairment

2 Policy on water reporting was revised in 2012 and 12 additional reporting sites were included

3 Restated values due to change in scope to exclude irrigation

Environment continued

Waste	2012	2011	2010
Hazardous waste intensity (kg/\$EBIT)¹	0.07	0.09	0.10
Hazardous waste (000s tonnes)	190.0	201.4	198.7
Recycled and re-used (000s tonnes)	60.0	66.9	64.0
Incinerated (000s tonnes)	118.0	121.5	124.0
Landfill (000s tonnes)	1.0	0.4	0.4
Other (000s tonnes)	11.0	12.6	10.3
Non-hazardous waste intensity (kg/\$EBIT)¹	0.04	0.04	0.07
Non-hazardous waste (000s tonnes)	109.8	94.5	133.7
Recycled and re-used (000s tonnes)	80.0	64.3	76.6
Incinerated (000s tonnes)	4.1	7.1	18.0
Landfill (000s tonnes)	18.5	19.1	28.7
Other (000s tonnes)	7.2	4.0	10.4
Sites with waste reduction programs	16	16	19
Environmental compliance			
Significant unplanned releases ²	0	0	0

1 \$EBIT excluding restructuring and impairment

2 Releases that escape beyond the site boundary and cause either environmental impact and/or concern from neighbors, regulators, etc

 Read more about "Environment" on www.syngenta.com/ar2012

Responsible agriculture

Resource efficiency programs (soil, water, biodiversity, IPM/ICM, safe use)	2012	2011	2010
Total investment (\$m) ¹	10.4	7.5	7.6
EAME ²	37%	48%	42%
North America	4%	20%	20%
LATAM	35%	14%	21%
APAC	24%	18%	18%
Active programs	157	150	182

1 Increase in investment is due to a focus on developing markets in APAC and LATAM

2 Including headquarters (Switzerland)

 Read more about "Responsible agriculture" on www.syngenta.com/ar2012

Product safe use

Medical stewardship ¹	2012	2011	2010
Countries with established Syngenta product toxicovigilance programs ²	85	85	85
Crop Protection sales represented	92%	89%	88%
Product safe use training			
Active training programs	92	61	90
Human health ³	83%	–	–
Environment ³	2%	–	–
Value chain ³	15%	–	–
People trained (m)	3.0	2.9	3.2

1 In 2012, reporting year ending September 30. In 2011 and 2010, reporting year ending December 31

2 Restated values due to change in scope to include Canada and the USA

3 2012 first year of reporting

 Read more about "Product safe use: leadership and training" on www.syngenta.com/ar2012

Performance data

Corporate Responsibility performance summary continued

Economic value shared

	2012	2011	2010
Revenue (\$m) ¹	13,866	13,268	11,641
Payments to suppliers	8,550	8,140	6,851
Employee wages and benefits	2,710	2,661	2,305
Payments to governments (taxes) ²	345	312	292
Payments to providers of capital ³	971	1,078	884
Capital expenditure	662	575	526
Corporate community investment ⁴	19	18	17
Economic value retained	609	484	766

1 In 2012, reporting year ending September 30. In 2011 and 2010, reporting year ending December 31

2 Consists of income and other taxes paid, excluding VAT (included in Payments to suppliers) and employment-related taxes (included in Employee wages and benefits)

3 Consists of expenditures for dividends, share repurchases (excluding those for employee share plans) and interest on debt

4 In 2012, \$0.5 million from resource efficiency programs

 Read more about "Economic value shared" on www.syngenta.com/ar2012

Business integrity

Corporate conduct¹	2012	2011	2010
Compliance cases reported through the compliance helpline ²	58	82	78
Animal testing compliance¹			
Management system audits performed in contract laboratories	15	8	6
Management system non-compliances found ³	1	0	0
Biotechnology and regulatory compliance¹			
Employees completing trial regulatory compliance training ⁴	1,559	2,044	1,593
Trial locations requiring a permit	400	406	435
Trial inspections performed by Syngenta	278	155	237

1 In 2012, reporting year ending September 30. In 2011 and 2010, reporting year ending December 31

2 This does not include cases reported through line management, HR or legal processes

3 Syngenta management system procedures were not fulfilled. Corrective actions were taken immediately

4 The peak in 2011 was primarily due to additional training during the integration of Seeds and Crop Protection

 Read more about "Business integrity" on www.syngenta.com/ar2012

Independent Assurance Report on the Syngenta Corporate Responsibility Reporting

To the Head of Legal and Taxes, Syngenta AG, Basel ('Syngenta')

We have performed assurance procedures to provide assurance on the following aspects of the 2012 Corporate Responsibility (CR) reporting of Syngenta.

Subject matter

Data and information disclosed in the CR reporting of Syngenta and its consolidated subsidiaries, for the financial year ended December 31, 2012 and with the indicated level of assurance as follows:

- The application of the Syngenta internal Health, Safety and Environment (HSE) and Corporate Community Investment (CCI) reporting guidelines to the CR reporting with a reasonable assurance;
- The internal reporting system and procedures, including the control environment, to collect and aggregate CR data with a reasonable assurance; and
- The CR Performance Summary disclosed on pages 60 to 64 of the Syngenta Annual Review 2012 with a limited assurance.

Our assurance procedures do not cover the indicators on capital expenditure, employee wages and benefits, payments to suppliers, governments and providers of capital, and economic value retained presented in the CR Performance Summary on page 64 of the Annual Review 2012.

Criteria

- The Syngenta internal HSE and CCI reporting guidelines; and
- The defined procedures by which the CR data are gathered, collated and aggregated internally.

Responsibility and Methodology

The accuracy and completeness of CR performance indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with Syngenta's internal guidelines, definitions and procedures on the reporting of its CR performance.

The Board of Directors of Syngenta AG is responsible for both the subject matter and the criteria. Our responsibility is to provide a conclusion on the subject matter based on our assurance procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000.

For the subject matter for which we provide limited assurance, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

Main Assurance Procedures

Our assurance procedures included the following work:

Evaluation of the application of group guidelines

Reviewing the application of the Syngenta internal HSE and CCI reporting guidelines.

Site visits

Visiting a Crop Protection site and a Seeds site in the USA. The selection was based on quantitative and qualitative criteria.

Interviewing personnel responsible for internal reporting and data collection at the sites we visited and at the Group level.

Assessment of the performance indicators

Performing tests on a sample basis of evidence supporting the CR Performance Summary relative to completeness, accuracy, adequacy and consistency.

Review of the documentation

Reviewing the relevant documentation on a sample basis, including, management and reporting structures and documentation.

Assessment of the processes and data consolidation

Reviewing the appropriateness of the management and reporting processes for CR reporting.

Assessing the consolidation process of data at the group level.

Conclusions

In our opinion

- The internal HSE and CCI guidelines are being applied properly; and
- The internal reporting systems to collect and aggregate CR data are functioning as designed and provide an appropriate basis for its disclosure.

Based on our work described in this report, nothing has come to our attention that causes us to believe that the data and information mentioned in the subject matter and disclosed with the CR reporting in the Syngenta Annual Review 2012 on pages 60 to 64 does not give a fair picture of Syngenta's performance in the area of CR.



PricewaterhouseCoopers AG

Zurich, February 15, 2013

Gerd Tritschler

Jonas Buol

Shareholder information

Syngenta shares are listed on the SIX Swiss Exchange and on the New York Stock Exchange, where the shares are traded as ADS (American Depository Shares).¹

Trading symbols

	SIX Swiss Exchange	New York Stock Exchange
Shares	SYNN	SYT

Shares in issue

At December 31, 2012	Number of shares
Total shares in issue	93,126,149
of which treasury shares	1,387,266

Share price and market capitalization²

At December 31, 2012	
Share price (CHF)	366.60
Share price (\$) (ADS)	80.80
Market capitalization (CHF million)	33,631
Market capitalization (\$ million)	36,748

Dividend history

	Dividend CHF
2008	6.00
2009	6.00
2010	7.00
2011	8.00
2012 ³	9.50

1 1 share = 5 ADS

2 For the purposes of calculating market capitalization the number of shares stood at 91.7 million

3 To be submitted to shareholders for approval at the Annual General Meeting on April 23, 2013

Syngenta share price performance January 1, 2012 – December 31, 2012

(Indexed to zero at closing price on December 31, 2011)



Syngenta ADS price performance January 1, 2012 – December 31, 2012

(Indexed to zero at closing price on December 31, 2011)



Reporting dates

First quarter trading statement	April 18, 2013
Annual General Meeting	April 23, 2013
Half-year results	July 24, 2013
Third quarter trading statement	October 17, 2013

A full form 20-F is accessible at: www.syngenta.com/ir

Investors can subscribe to financial releases via RSS at: www.syngenta.com/ir

The full-year results press release can be viewed up to six months after the event at: www.syngenta.com/fyr2012

Syngenta share price performance January 1, 2008 – December 31, 2012

(Indexed to zero at closing price on December 31, 2007)



Over the last five years, Syngenta has outperformed the Swiss Market Index by 47 percent and the Eurotop 300 index by 52 percent.

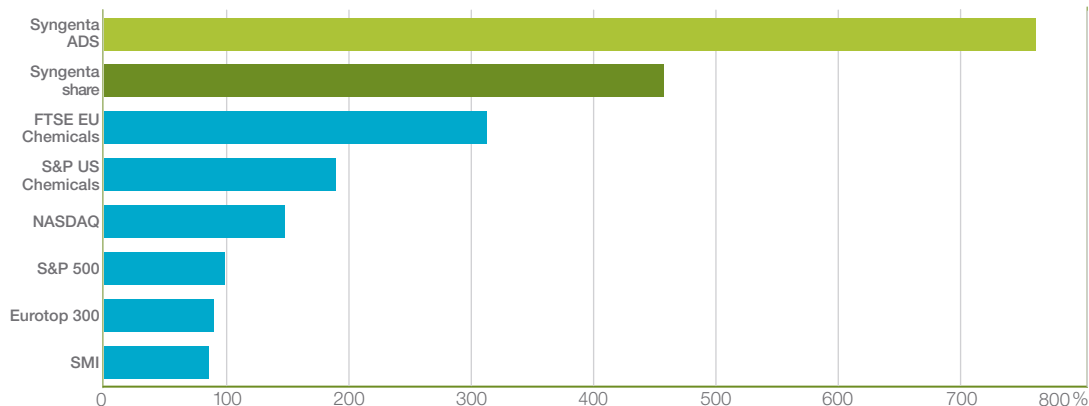
Syngenta ADS price performance January 1, 2008 – December 31, 2012

(Indexed to zero at closing price on December 31, 2007)



The Syngenta ADS has outperformed the major US stock market indices by around 60 percent since 2007.

Total shareholder return¹ January 1, 2003 – December 31, 2012



Over the last 10 years, total shareholder return is 455 percent from the Syngenta share and 757 percent from the ADS.

¹ Share price appreciation plus reinvested dividends, indexed to closing price on December 31, 2002

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For the business year 2012, Syngenta has published three reports: Annual Review (incorporating the Corporate Responsibility Report), Financial Report and Corporate Governance Report and Compensation Report.

All documents were originally published in English. The Annual Review 2012 and the Corporate Governance Report and Compensation Report 2012 are also available in German.

These publications are also available on the Internet: www.syngenta.com

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