



syngenta

Progress Report 2016

**the
good
growth
plan**



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Find more details online at
www.goodgrowthplan.com

Adding value

sustainably

As a business serving the agricultural industry, we help farmers feed a fast-growing world population. But there's more: we aim to lead in sustainability.

The Good Growth Plan is not only driving the way we add value to a sustainable agriculture system; it's measuring the results, so we can quantify the difference we make.



Accelerating

progress of the plan

3,700+
farms

Today, we have a well-developed network of more than 3,700 farms and many other partners...

23
crops

...working with us to demonstrate and measure what's possible for 23 crops...

42
countries

...the environment, rural communities and agriculture workers in 42 countries.

The Good Growth Plan is part of our business strategy, designed to focus our skills and resources on understanding and meeting the most pressing needs of our customers and stakeholders. It demands innovation and enterprise from every part of our organization.

The challenge of feeding a fast-growing world population is well documented. Every day, our planet wakes with nearly 200,000 more mouths to feed and more farmland lost to erosion. Many people who produce the world's food are living in poverty, while biodiversity is disappearing fast. Helping farmers rise to these challenges is part of our mission. It's central to our strategy for business growth.

We have a plan to meet these challenges: The Good Growth Plan. Its mission is to improve the sustainability of agriculture and our business through six commitments to be achieved by 2020. The Plan is central to our strategy for ensuring that our own business has a sustainable long-term future. This is far-sighted business planning with hard, stretch targets. We're consciously setting our sights higher – and measuring and reporting the impact.

We report our progress against these KPIs each year, and provide additional progress information online at www.data.syngenta.com

We are now going further, seeking to measure not just the extent of our reach but also the nature and quality of the value we add. We are assessing our programs' impact on people, communities and the environment.

The principles and priorities of The Good Growth Plan are now deeply embedded in the way we do business. And as we build what we learn into our commercial offer, we are also building the evidence that it delivers real, measurable value for growers and society at large.



Find more details online at www.goodgrowthplan.com

The United Nation’s Sustainable Development Goals (SDGs) address forms of global inequality, insecurity and injustice through specific targets to be achieved by 2030.

These targets integrate the economic, social and environmental dimensions of development while prioritizing the management of natural resources for sustainable production and consumption. Underpinned by human rights, the goals have the ambition of leaving no one behind. They ask society to:

- ➔ Build multi-stakeholder partnerships, address governance challenges and invest in new technologies and business models
- ➔ Share better data, monitoring and accountability to accelerate technological innovation

How can Syngenta meaningfully contribute?

Agriculture today is struggling to meet the challenge of feeding an increasing population sustainably, which will likely reach 8.5 billion people by 2030. Since 2013, we’ve been working toward our own commitments to improve agriculture by 2020 through The Good Growth Plan to provide:

- ➔ The resource efficiencies that must underpin increasing agricultural productivity, while mitigating the effects of climate change
- ➔ The ecosystem resilience necessary to sustain this productivity in the future
- ➔ The far-reaching knowledge transfer that smallholder farmers, in particular, will need in order to share in the benefits of better agricultural production

How does The Good Growth Plan support the UN SDGs?

The Good Growth Plan is a learning process, both for us and the people who work with us. Its value will depend to a large extent on how successfully we pass on what we know, and what we learn – to small- and large-scale farmers, the farmworkers we train, and the partners who use our openly published data.

Today, we have a well-developed network of more than 3,700 farms. We’re working with partners in 42 countries to demonstrate and measure what’s possible for 23 crops, the environment, rural communities and agricultural workers. Our six Good Growth Plan commitments help us quantify how we contribute to the Sustainable Development Goals set out in the United Nations Agenda 2030.



For more on the UN’s SDGs, visit: sustainabledevelopment.un.org/topics





Make crops more efficient

Increase the average productivity of the world's major crops by 20 percent without using more land, water or inputs

Progress and key achievements

- ➔ Combined farm-level data with 'big data' to give richer, more consistent analysis and feedback
- ➔ Helped drive creation of open data ecosystem to accelerate innovation
- ➔ Began to identify key drivers for sustainably enhancing productivity

Average land productivity increase¹ %

1.2%



¹ On reference farms compared to baseline 2014

Farm network

	2016	2015	2014
No. of reference farms	1,039	1,062	860
No. of benchmark farms	2,694	2,586	2,738

The world needs to grow more food in the next 50 years than it has produced in the past 10,000 while using resources far more efficiently. We work together with growers who use our products every day, and focus particular effort on smallholders, who have the greatest potential to increase productivity and in turn improve their own livelihoods.

Measuring the difference we make

To test and measure what's possible, we have created a network of farms across 23 crops in 42 countries. In 11 countries we are focusing particularly on smallholders, who have the greatest potential to increase productivity. We have reference farmers working with our field experts to trial new solutions and raise productivity and we have benchmark farmers who share with us their data to compare and complement the assessment.

In 2016, we collected data from a total of 1,039 reference farms that follow Syngenta protocols, as well as 2,694 randomly selected benchmark farms for comparison. Across all our reference farms, the average land productivity increase in 2016 was 1.2 percent. This was 3.8 percentage points higher than benchmark farms where we saw an average 2.6 percent decrease in land productivity.

Such a large farm network sees constant changes over time driven by developments in the business environment. For example, we are now focusing our reference farm network in Africa and the Middle East entirely on smallholders to make our service to them more impactful. We've improved our progress measurement to allow for changes in reference farms while still measuring consistently. Find more details online at www.data.syngenta.com

Making our data more valuable

We've improved the way we share our Good Growth Plan data with growers by focusing on the results most relevant to them.

Farm performance is affected by many factors, both controllable and uncontrollable, and what works for one grower, crop or location may not work for another: the more data we can analyze, the greater our chances of understanding why. We now have unprecedented quantities of detailed farm-level information, which – by sharing them as open data – we are supplementing with global information on factors such as weather, soil and growing conditions.

Global food security is too big a challenge for any one organization, and the pace of innovation will depend on how easily people and organizations can share data. Without an efficient global infrastructure for agricultural data, our openness and transparency are of limited value.

To help build this infrastructure, we joined GODAN, the Global Open Data for Agriculture and Nutrition initiative, which now has over 375 partners including governments, NGOs and

commercial organizations. At GODAN's 2016 Summit, we co-presented a discussion paper setting out priorities for creating an effective data ecosystem for the industry, from engaging stakeholders to sourcing, sharing and collaborating with data. Commissioned by Syngenta with contributions from partners – the Consultative Group for International Agricultural Research, the Open Data Initiative, information specialists Agroknow and Agrimetrics – this paper is helping to drive an open data revolution in our industry.

What we're learning from our data

In collaboration with external partners, we have been conducting a wide range of analyses, using computers to mine our data and test environmental models. Using machine intelligence will help us gain previously unavailable insight into patterns and correlations. Given the

huge numbers of variables involved, it is too early to draw firm conclusions about the keys to sustainable productivity increases.

We aggregate full-year data to calculate global averages on reference and benchmark farms. In this report, we focus on how efficiently land, pesticides and nutrients are used. In addition, we detail smallholder farm productivity – they achieved the hoped for higher rate of increase in productivity of 8 percent, compared with larger farms where the average was 1.2 percent.

Yields and pesticide field application efficiency generally seem to correlate with external factors such as pest pressure, adverse weather conditions, access to training and our agronomic advice. Pesticide field application efficiency for example was generally lower this year, though reference farms performed better than benchmark farms.

What's next?

Each growing season provides us with more data to help us and our partners to identify keys to more productive agriculture.

Meanwhile, a particular focus in 2017 will be to create more value for farmers participating in our reference network. We can analyze their data to make optimized recommendations or support multi-stakeholder partnerships that provide incentives for sustainable improvements in the field. For example, our Fruit Quality Contract program helps farmers comply with stringent food chain standards.

And, while building trust externally by publishing data openly and transparently, we will take care to earn growers' trust by protecting their privacy so that they stay in control of their own data and results.

Getting the most out of every hectare

Tanner Tanke grows soybeans, sugar beets and wheat in North Dakota, USA. As a Good Growth Plan reference farmer, he tracks the resources it takes to grow his crops.

Knowing the efficiency of his farm inputs helps him not only keep an eye on his bottom line, but also improve the sustainability of his farm. This helps him get the most out of every hectare.



Find more details online at
www.goodgrowthplan.com





Rescue more farmland

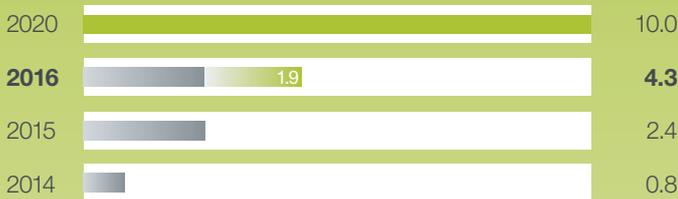
Improve the fertility of 10 million hectares of farmland on the brink of degradation

Progress and key achievements

- Integrated soil conservation protocols into commercial offers as additional farmer benefit
- Continued campaigning to promote good soil management practices
- Joined multi-stakeholder platforms to promote the adoption of conservation agriculture

Benefited farmland¹ m ha

4.3m



¹ Cumulative since baseline 2014

Poor farming practices expose soil to wind and rain erosion, leaving millions of hectares infertile. Every year, the world loses enough land to produce 20 million tons of grain.

The UN Convention to Combat Desertification (UNCCD) estimates that 52 percent of the land used for agriculture is moderately or severely affected by soil degradation. There's an urgent need for action by governments and the agricultural sector to restore the fertility of existing land and prevent further degradation: this is explicitly recognized by the UN in its Sustainable Development Goals.

Measuring the difference we make

We are raising awareness of this issue and promoting conservation agriculture practices based on minimum soil disturbance, crop rotation and permanent ground cover. In 2016, our programs benefited an additional 1.9 million hectares of land – bringing the cumulative total to 4.3 million hectares and keeping us on track towards our 2020 target of 10 million. The substantial increase in 2016 was due mainly to better integration of soil management practices into our commercial offers, which now account for some 70 percent of hectares benefited.

Investing in soil health

Péter Szabadka knows taking good care of his soil is an investment in the future. His family farm in Hungary grows a variety of crops using our CONTIVO® solution, which promotes conservation agriculture to reduce erosion and maintain soil health. He says it's not only good for the environment – but for his productivity as well.



Find more details online at www.goodgrowthplan.com

Driving positive change

Integrating soil conservation practices into our product protocols and training is helping us to differentiate our commercial offer. In 2016, we began investigating the soil conservation profiles of key products and integrated offers so we can help growers to maximize their contribution to soil conservation. Our hybrid barley HYVIDO®, for instance, has valuable characteristics such as deep root systems that can contribute more to soil fertility when enhanced by protocols that include crop rotation and nutrient management.

The science behind conservation agriculture is well established. Our aim is to drive effective technology transfer by helping farming communities and local stakeholders to adapt it to local conditions. Farms of all sizes will benefit, but there is no one-size-fits-all solution:

soil conservation needs to be tailored to local environments and crops, and the best results come from marrying proven science to local knowledge. In this way, agriculture – and the communities that depend on it – will become more resilient to challenges such as climate change.

We are engaging the conservation community to promote the adoption of conservation agriculture and secure validation for our methods. This includes presenting to major conventions – such as the 2016 UNCCD World Day to Combat Desertification in Beijing, China, where Syngenta was invited to represent an agri-business viewpoint. We are promoting the benefits to farmers and showing them how conservation agriculture can protect against stresses such as drought. Seeing is believing, and investment in demonstration plots and farms is an essential part of our advocacy and technology transfer effort.

What's next?

In 2017, we'll be working with expert partners to pilot impact assessments of eight soil conservation projects across all our major regions. These environmental and socio-economic assessments will help to accelerate change by showing more clearly the returns farmers can expect. They will also highlight immediate benefits – such as savings on tractor fuel – that arise before longer-term benefits such as climate change resilience become apparent.

We'll continue working with commercial partners by creating and promoting open platforms that combine technologies, machinery, financial solutions and education. We'll also continue working with the UNCCD on the Soil Leadership Academy to increase awareness and urgency among policymakers on soil health and fertility issues.





Help biodiversity flourish

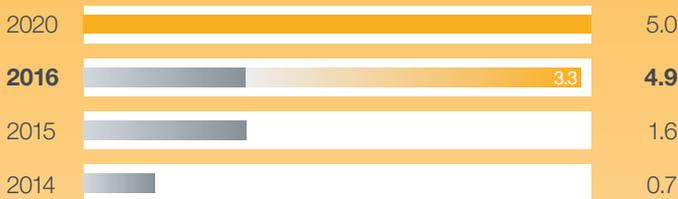
Enhance biodiversity on 5 million hectares of farmland

Progress and key achievements

- Developed new methodology for assessing environmental and socio-economic impacts of biodiversity interventions in agricultural landscapes
- Worked with the conservation community communicating to policymakers the importance of landscape connectivity
- Increased the impact of our partnership with The Nature Conservancy to benefit 2.8 million hectares in Brazil

Benefited farmland¹ m ha

4.9m



¹ Cumulative since baseline 2014

The sustainability of agriculture relies on biodiversity – for plant breeding, pollination and food diversity. Our customers and our own seed production rely on this critical resource.

Biodiversity suffers as species' habitats are lost or fragmented, and in recent decades it has been declining at an unprecedented rate. Climate change increases the risks. We are promoting and enabling action to protect and enhance biodiversity – primarily by managing marginal and less productive farmland alongside fields and waterways to create rich, connected wildlife habitats. This is recognized as the greatest opportunity to enhance biodiversity in agricultural landscapes.

Measuring the difference we make

Our approach seeks to restore farmers' role as custodians of the land; but we also recognize that they have livelihoods to earn and businesses to run. To present a persuasive case to them, and to policymakers, we need to quantify the benefits that can be delivered and the returns farmers can expect. So we have developed an impact assessment methodology that we piloted in 2016 at eight sites in Asia, Europe, Latin America and North America. The assessments are being carried out by Arcadis, a leading global consultancy in natural assets, and are designed to measure both the returns to farmers and the wider socio-economic benefits.

So far, we have engaged in programs in 34 countries benefiting a total area of 4.9 million hectares. This reflects the great success of our partnerships with other stakeholders and in particular The Nature Conservancy in Brazil, which alone contributed 2.8 million hectares in 2016. The Soja+Verde project works on the restoration of rainforest in agricultural landscapes. The significant positive impact on biodiversity is achieved through a new approach to landscape connectivity. As a consequence, we are already close to our 2020 target of 5 million hectares.

Stimulating thought and action

We aim to be both thought leaders and practitioners – publishing technical papers and making the case for action, while also providing seeds, demonstrations, training and expertise to facilitate that action.

We are making biodiversity solutions an integral part of our commercial approach. To support this, we are building an extensive network of partners: regional governments, municipalities, NGOs, farmers and academics. Farmers want to see evidence of the benefits on offer, so partnering with a local university on a demonstration plot is a typical first step.

We work closely with conservation bodies to review and validate our approach. With the World Business Council for Sustainable Development we brought together a coalition of businesses, conservationists and institutions to produce a policy briefing paper on the multifunctional benefits of promoting biodiversity corridors in agricultural landscapes. Part of this work was presented at the UN Convention on Biological Diversity conference in December 2016.

Driving action up the value chain

A key goal is to establish biodiversity alongside water and soil conservation as a primary focus for value chain partners. We are encouraging them to include biodiversity in the criteria they set for supply contracts with farmers, and are pleased that a growing number of food manufacturers now see this as part of their own responsibility towards the environment and their customers. Some even advertise it on their consumer packaging.

What's next?

In 2017, we'll continue to work with partners to make investment in field margin habitats simpler and cheaper for farmers, and to embed the concept more deeply into our commercial offer. We'll also continue promoting the benefits across a broad spectrum of stakeholders, supported by findings from our impact assessments.

Preserving the land for generations

Luciane Copetti is a grower and has been Secretary of Environment of Lucas do Rio Verde municipality, which is a major production area for soybean in Brazil. She's been a leading figure in mobilizing growers, government, NGOs and companies to establish forest conservation areas amongst the numerous farms that operate there. Her work supports the Soja+Verde project, an environmental partnership involving Syngenta and The Nature Conservancy.



Find more details online at
www.goodgrowthplan.com



Empower smallholders

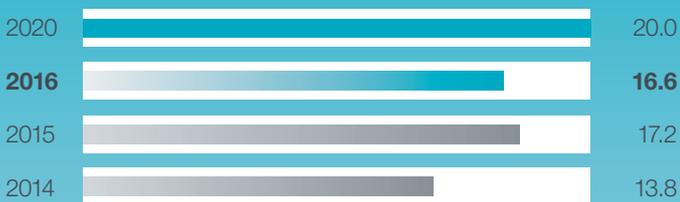
Reach 20 million smallholders and enable them to increase productivity by 50 percent

Progress and key achievements

- Land productivity increase on smallholder reference farms 8 percent
- Partnerships to scale-up social impact assessment
- Addressed grower challenges through partnerships such as the Sustainable Table Grapes Initiative in India

Smallholders reached¹ m

16.6m



¹ Through sales

Smallholder growers are critical to the world's food security, yet they often face high financial risks and low returns. Every day, 180,000 people leave rural communities to live in cities.

Over half our sales are in developing countries dominated by smallholder farmers, particularly in Africa, Asia Pacific and Latin America. As our contact with smallholders is largely indirect through vendors of our products, we use sales volume data to calculate the number of smallholders reached.

In 2016, sales of products targeted at smallholders were reduced by adverse weather and changes in our go-to-market strategies; as a result, the calculated number of smallholders reached through sales reduced to 16.6 million (2015: 17.2 million). However, we remain confident of reaching our goal of 20 million by 2020.

Productivity gains on smallholder farms come from a combination of state-of-the-art products made available in pack sizes appropriate for smallholders and the necessary training to use them effectively. We are measuring our progress in improving smallholder productivity through our network of reference farms. Today, we have 73 smallholder reference farmers in our Good Growth Plan farm network. The average productivity gain on these farms in 2016 was 8 percent, and we assess the benefit this can bring through social impact assessments.

Measuring the difference we make

Reaching more smallholders is a means to an end: we want to increase our impact on the wellbeing and prosperity of these farmers and their communities.

To see the broader picture of what we bring to them through our products and services, we have been working with the Sustainable Markets Intelligence Center (CIMS) and other partners including the Sustainable Food Lab to develop a new impact assessment methodology. This brings a consistent approach to all our social impact assessments worldwide. It enables us to examine our impacts from economic, social and environmental perspectives, and to consider a broader range of factors such as farmer and farmworker safety.

Harmonizing our approach will allow us to scale-up the number of assessments by working with multiple partners – customizing individual studies to suit different countries, cultures and crops while still obtaining rigorous, consistent and comparable results. The new approach is currently being tested in Indonesia.

This work will be supported by our new global partnership with Solidaridad – an international development organization that has been focused for over 45 years on social justice and the sustainable production of food. Solidaridad's goals are closely aligned with those of The Good Growth Plan, and the organization is well respected for its work with companies in the value chain on practical action to improve conditions for farmers.

Putting what we learn into action

In 2016, we received the findings from three social impact assessments conducted in 2015 in China, India and Mexico. These are giving us a better understanding of our interactions with smallholders in these countries, which will help us to refine our go-to-market models to increase the benefits we bring to farmers and communities – for example, by helping to ensure more rigorous adoption of safe-use practices.

Not all the issues we identify can be addressed by us alone. While prioritizing factors we can influence directly, we are actively seeking and developing partnerships to drive broader change by addressing challenges that our impact assessments bring to light. In India, for example, we have gained valuable insights into the problems

caused by growers' lack of access to microfinance. And in both China and India there's a need for more effective ways of recycling our product containers after use.

One encouraging model is the multi-stakeholder Sustainable Table Grapes Initiative in India, where we are one of the partners providing input on sustainable growing protocols. India is one of the largest exporters of table grapes to the European Union (EU). Sales have grown dramatically, but further success will depend on significant progress in areas such as pesticide residues. Co-ordinated by IDH, The Sustainable Trade Initiative, this project brings together stakeholders ranging from growers in India to retailers in the EU with the aim of making the entire industry more sustainable.

What's next?

In the year ahead, we will continue developing partnerships to tackle structural challenges facing smallholders in areas such as financing and access to technology and markets. We will also be undertaking new social impact assessments using our new methodology in Brazil, Guatemala, Indonesia and Mexico.

Improving yields and livelihoods

Priscar Mwangangi grows tomatoes, peppers and corn on a small plot of land in Kenya. Heavy rains, crop disease and low-yielding seeds kept her from achieving her dream of growing healthy plants all year round. With training and high-quality inputs from Syngenta, her farm is now thriving. She's helping show growers in her community how they can improve their yields and livelihoods as well.



Find more details online at
www.goodgrowthplan.com





Help people stay safe

Train 20 million farm workers on labor safety, especially in developing countries

Progress and key achievements

- ➔ Strengthened and scaled-up train-the-trainer initiatives through new Master Trainer Program
- ➔ New partnerships to improve knowledge transfer

People trained on safe use¹ m

17.2m



¹ Cumulative since baseline 2014

We share a responsibility to help improve occupational safety and health in agriculture. This applies particularly to smallholders, especially those in developing countries, who often lack access to guidance on using crop protection efficiently, responsibly and safely.

Measuring the difference we make

In 2016, we reached 6.8 million people with dedicated safety training programs and safe-use awareness-raising initiatives linked to commercial activities. This brought the cumulative total since 2014 to 17.2 million and kept us well on track to meet our 20 million target by 2020. Smallholders make up some 70 percent of the people we train on safe use, as part of a broader training on using our products to best effect.

Enhancing our training capability

We constantly look for ways to enhance the reach and quality of our safe-use training. Key to this is our train-the-trainer program, which equips our commercial teams to deliver high-quality training. In 2016, we emphasized that this is

Spreading the word on safe use

Shi Lijie was trained by Syngenta on the safe use of pesticides 10 years ago.

As a corn and rice grower in Liaoning province, China, she learned first-hand how pesticides can be applied and stored safely through the “5 Golden Rules” of safe and effective use of crop protection products. She now leads trainings in her community for Syngenta to help spread the word as an advocate for safety.



Find more details online at www.goodgrowthplan.com

central to the way we do business by introducing a cadre of Master Trainers who are part of our mainstream commercial organization rather than a specialist stewardship team. Our target is for each of our territories to have at least one Master Trainer responsible for training new trainers: in its first year, the new scheme has already covered more than 50 percent of territories, including all territories where we reach smallholders.

Driving real behavior change

Effective training will have a lasting effect on farmers' behavior. To maximize its effectiveness, we need to ensure that farmers and farm workers fully understand our recommendations and why they matter, so that actions such as using the right personal protection or correctly following instructions on product labels become instinctive.

As one of the outcomes of our 2015 Farmer Safety Workshop, we have formed a joint working group with Solidaridad to seek deeper understanding of farmers' behavior and ways to improve knowledge transfer and adoption of training messages.

Our partnership on training is part of a broader collaboration with Solidaridad on smallholder empowerment, which also covers aspects such as capacity building and productivity enhancement.

What's next?

In the year ahead, we aim to engage more organizations in the discussion on behavior change. To help farmers recognize the real value of using chemicals safely, we need to involve more of the value chain. This will be the focus of a second Farmer Safety Workshop. We are planning to widen the participation of the private sector as well as the NGOs and academics who were the main contributors to our first workshop.





Look after every worker

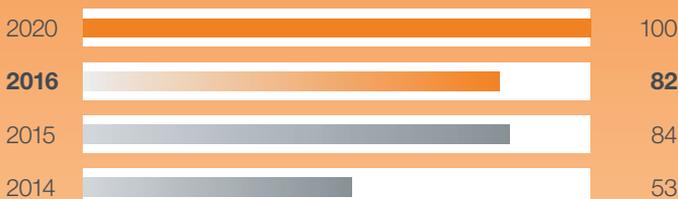
Strive for fair labor conditions throughout our entire supply chain network

Progress and key achievements

- All our seed suppliers in Latin America and Asia Pacific covered by our Fair Labor Program by end-2016
- Of our commercial flowers farms, 73 percent have GLOBALG.A.P. certification and 24 percent have G.R.A.S.P. assessment
- Two-thirds of our chemicals suppliers covered by our Supplier Sustainability Program

Seed supply farms in our Fair Labor Program %

82%



We recognize a responsibility to ensure that our supply chain meets the highest ethical standards, especially in developing countries. Offering workers fair and attractive conditions will also help agriculture to stem the population drift to cities that can undermine efforts to increase production.

We are committed to ensuring fair labor conditions across our supply chain. But this is no simple task: our seed supply chain – with almost 30,000 farms – poses particular challenges.

We have worked with the Fair Labor Association (FLA) since 2004 to develop and manage our Fair Labor Program, requiring suppliers to comply with labor-rights codes in nine areas: Employment Relationship; Nondiscrimination; Harassment and Abuse; Forced Labor; Child Labor; Freedom of Association and Collective Bargaining; Health, Safety and Environment; Hours of Work; and Compensation.

Measuring the difference we make

Each year, we aim to audit compliance on 20 percent of farms in each country. The findings trigger corrective action plans and improvements to the program. In higher-risk areas the FLA independently audits a further 2 to 5 percent and publishes its findings. The FLA audit findings – together with the Syngenta remediation plans and reports on progress against these – are available on the FLA website¹.

In 2016, we completed implementation of the program in China, Colombia, Mexico and Paraguay. At the end of the year, it covered over 24,000 suppliers, representing 82 percent of our seed supply chain. The slight decrease of coverage from 84 percent in 2015 is due to adaption to local market demand for seed production in a couple of countries in the program. We now have 100 percent coverage of suppliers in Latin America and Asia Pacific, and of all countries regarded as high-risk for labor rights. During the year we monitored compliance at 4,500 farms representing 18 percent² of the farms in the program; the FLA undertook some 20 independent audits during the same period, visiting around 200 farms covering about 2,000 workers.

Our findings correspond largely to those of the FLA. Although some topics are more common in certain regions, there are more general themes – including compliance with safety measures and trust in existing grievance mechanisms.

A particular challenge that we are currently addressing is compliance with minimum wage payments to workers on our supply farms in India. This is a well-documented problem for agriculture in India, as prevailing market wages differ – sometimes significantly – from the legal minimum wage. In 2016, we organized a multi-stakeholder dialogue on the topic, held jointly with the FLA, in Hyderabad. Eleven companies representing 80 percent of the hybrid seeds industry in India attended the meeting, along with 21 civil society delegates representing trade unions, NGOs, research

institutions, multilateral agencies, as well as both male and female farmers and farm workers.

Building on feedback from delegates, we started two pilot projects – one in corn and one in hot pepper, covering a total of about 3,000 workers – to address the challenge of ensuring that workers receive the wages agreed and paid to farmers. Other companies attending the dialogue have also committed to run pilots in their supplier networks.

Certifying our flower suppliers

Work continues in our flower business to obtain certification to GLOBALG.A.P./G.R.A.S.P. social practice standard for all our own and third-party commercial flowers farms. Take-up among our major suppliers has been rapid, and by the end of the year 73 percent of farms had GLOBALG.A.P. certification and 24 percent had undergone the G.R.A.S.P. assessment. In some countries, the largest challenge has been finding auditors certified to carry out both the GLOBALG.A.P. and G.R.A.S.P. work.

Auditing chemical suppliers

We have a long tradition of assessing and auditing our chemical suppliers' compliance with our health, safety and quality standards. In 2015, we joined the Together for Sustainability (TfS) initiative, which pools the resources of its member companies to optimize the efficiency and frequency of supplier audits and assessments. TfS also covers a broader range of criteria including labor rights compliance.

During 2016, we carried out risk assessments on all our chemical suppliers over a certain spend and categorized them as high-, medium- or low-sustainability risk. We aim to bring all medium- and high-risk suppliers into our Supplier Sustainability Program in the coming years. In 2016, two-thirds of our target suppliers were covered by either our internal HSE audit or the TfS supplier program.

¹ www.fairlabor.org/affiliate/syngenta

² In some countries, the growing season was still underway when we completed our reporting year on September 30 – so some farms monitored are not included.

What's next?

By 2020, we will have added some 20 more countries to our Fair Labor Program to ensure 100 percent coverage. In 2017, we will be rolling the program out to four more countries in Europe; North America will follow in 2018. We will continue working to build rigor into our monitoring so that we can provide robust progress reporting.

Our goal is not merely to tick compliance boxes but to achieve real improvement. We have come a long way, but are under no illusions about how much more there is to do. These are complex issues involving many actors from farmers to governments: we welcome discussion to share ideas and experience, and by reporting transparently on our progress we hope to contribute to better informed debate.

Advocating for fair labor

Renukamma Umapathi's small family farm in southern India produces Syngenta seed. After being trained in our Fair Labor Program, she advocates for the eradication of child labor, workers' rights, and issues of health and safety for farm workers. She's been instrumental in changing attitudes of other seed growers in her village to help keep children out of the fields and enrolled in school.



Find more details online at
www.goodgrowthplan.com



Delivering

around the globe



Europe, Africa and Middle East

EAME is our largest region in terms of sales. At present our business comes mainly from Europe, which has some 20 percent of the world's planted area – ranging from intensive farming of field crops in Western and Central Europe to production of high-value fruit and vegetables around the Mediterranean. An increasing share of future sales will come from growing markets including Russia, Ukraine and Africa.

We are making significant progress on all six Good Growth Plan commitments. Our focus on sustainability is having an increasing influence on our commercial performance and clearly differentiates our business model.

Our EAME farm network covers 13 crops in 19 countries and reflects the region's crop diversity, climatic range and focus on high-quality produce. In enhancing crop productivity, we consider quality as well as quantity to better meet the needs of the value chain and reduce crop wastage.

We are continuously improving how soil conservation is built into our commercial activities such as HYVIDO® hybrid barley, the CONTIVO® solution or minimum tillage in South Russia. Commercial offers including biodiversity in loyalty programs account for half of the benefited acreage. We've had particular success in Germany. Our loyalty program provides biodiversity seed mixtures and planting support for better management of field margins. This, in turn, often attracts additional benefits for the farmer from local rural development plans.

In Africa and the Middle East, we have reached some 350,000 smallholders, primarily by offering products in smaller pack sizes with pictograms on the labels. We are now building on a model originally developed in India, which involves training smallholders as lead

farmers who help with knowledge transfer and product distribution to neighboring growers. We have linked our outreach to smallholders to the expansion of safe-use training, and we have been able to recruit many lead farmers into this activity through our train-the-trainer programs.

In 2016, we started preparations for implementation of the Syngenta Fair Labor Program with seed suppliers in Germany, Italy, Spain and the UK. We expect implementation to be completed in 2017. Over 80 percent of commercial flowers farms in EAME hold GLOBAL.G.A.P. certification and more than 20 percent a G.R.A.S.P. assessment. Both certification and assessments are renewed yearly.

Of our chemical suppliers in EAME, over 70 percent are included in our Supplier Sustainability Program.

>70%

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North America

North America comprises Canada and the USA. It generates about 25 percent of Syngenta's revenue. Its growers – among the most competitive and productive in the world – are typically early adopters of new technologies, from crop and seed protection to soil conservation and digital farming. The region has about 10 percent of the global planted area, but half the world's genetically modified seed cultivation.

North America has a sophisticated agricultural industry achieving high levels of productivity through technology. But there is still potential to increase productivity while also ensuring that performance is sustainable. In 2016, we expanded our North America network of reference farms to more than 150, including the first Canadian reference farms, to capture additional sustainable productivity data for canola, wheat, peas and barley production.

To promote soil conservation techniques more effectively, we seeded cover crop demonstrations at selected sites in our Grow More Experience network of demonstration farms. These will enable us to show channel partners, growers and other influencers the benefits of minimum-tillage techniques.

We have continued to build on long-standing partnerships with conservation groups to help farmers manage for increased biodiversity. In 2016, this work benefited a further 219,000 hectares of farmland.

As part of our safe-use outreach, we have trained more than 900 pest control professionals in the safe and correct application of an insect control technology from our Lawn and Garden portfolio to help fight the spread of the Zika virus.

We also work with our suppliers to improve processes and implement sustainability standards. In 2016, almost 50 percent of our chemical suppliers were covered by our Supplier Sustainability Program.

Grow More

Through our Grow More Experience network of demonstration farms, we show the benefits of minimum-tillage techniques.



Delivering around the globe



Latin America

This is the second largest of our four regions by sales. Latin America accounts for almost 10 percent of the world's cropped area and is the global leader in soybean, sugar cane and coffee production. Farm scale ranges from a predominance of smallholders in Central America to highly-technified large-scale farms in Argentina and Brazil – where over 90 percent of soybean and 80 percent of corn includes genetically modified traits.

We are making good progress on all six commitments in LATAM.

As well as offering higher crop productivity, our integrated solutions generally incorporate other benefits that support The Good Growth Plan. For example, INTEGRARE™ in Brazil and INTEGRASOJA™ in Latin America South include water and soil nutrition management services that ensure more sustainable use of land. We've had significant successes in soil conservation across the region.

We have extended safe-use training across the region. We doubled the number of people trained to close to 800,000. This increase was driven by the introduction of the safety multiplier train-the-trainer program in Latin America North and better inclusion of safe-use training in the sales team's reporting tool in Brazil.

Smallholder inclusion programs provide improved farming practices, better market access and boost the prosperity of local communities. Examples include the MasAgro Program in Mexico, run in partnership with the International

Maize and Wheat Improvement Center (CIMMYT), and NUCOFFEE™ Sustentia in Brazil, which has UTZ as a certification partner.

On biodiversity, we have made excellent progress in Brazil. In partnership with The Nature Conservancy and local organizations in the Cerrado, the country's main agricultural region, we support growers to preserve parts of their land as biodiversity habitats. This outstanding program encourages growers to go beyond meeting national legislation requirements. Through carefully planned landscape connectivity, the program benefited more than 2.8 million hectares of farmland in 2016 and is our largest Good Growth Plan biodiversity project.

Over the last few years, we achieved impressive improvements in labor conditions on our seed supply farms in Argentina and Brazil. We have now taken this experience to other countries, and in 2016 we completed the implementation of our Fair Labor Program in all seed supplying countries in the region.

2.8m ha

Our biodiversity program, in partnership with The Nature Conservancy, benefited more than 2.8 million hectares of farmland in 2016



Credit: TNC and photographer Rui Rezoned



Asia Pacific

Accounting for 40 percent of the world's cultivated land, APAC is a region dominated by smallholders farming less than 2 hectares.

Changing diets and good scope for improving yields present significant opportunities for growth.

The Good Growth Plan is a key differentiator for Syngenta in APAC, helping to focus our efforts on improving the sustainability of agriculture, in particular empowering the 400 million smallholder farmers who are responsible for most of the agricultural activity in the region.

In 2016, we initiated a project in partnership with Mercy Corps to address a key constraint faced by smallholder corn farmers in the Dompu, Bima and Sumbawa districts of Indonesia. Finance is crucial for these farmers if they are to access

better technology to help improve productivity. We worked with Mercy Corps, which provides financial literacy training to help farmers understand their options and better manage risk, and a micro-finance institution that provides low interest loans and crop insurance. Syngenta offers agronomy knowledge and training, and the project has resulted in an average yield improvement of 12 percent and a 23 percent improvement in farmer profitability.

The Good Growth Plan also commits Syngenta to achieving significant improvements in crop productivity. In Bangladesh, we have recognized that women farmers are often the key to improving rice productivity, and we are working to partner with local organizations to improve women farmers' access to quality inputs, agronomy knowledge and market information, all of which help to drive significant improvements in overall productivity and profitability.

The large number of smallholder farmers in APAC means that effective stewardship of our products is extremely important. In 2016, we reached almost 6 million farmers through farmer

meetings, training them in safe use with the application of the "5 Golden Rules" of safe and effective use of crop protection products. We also continue to work with our distributors and retailers to ensure they understand the importance of safe use, recognizing that the channel is often a key source of information for farmers. Increasingly, we are working to partner with external organizations to extend the reach and impact of our stewardship training.

In recognition of the importance of biodiversity, we have created several innovative partnerships to support improvements in pollinator health. Our early work with the Institute of Apicultural Research within the China Academy of Agricultural Science, the University of Western Sydney in Australia and the Indian Council of Agricultural Research holds great promise for establishing the key role that modern agriculture can play in ensuring the health of pollinating insects. We have also actively extended the application and reach of Operation Pollinator projects across APAC to provide essential habitats for feeding and nesting pollinators in field margins, tailored to local conditions.

6m

We reached almost 6 million farmers through farmer meetings, training them in safe use with the application of the "5 Golden Rules" of safe and effective use of crop protection products



Measuring

The Good Growth Plan

The Good Growth Plan Progress Data

Since we launched The Good Growth Plan, we've established a solid foundation for reporting on progress that relies on independent data collection and validation, assurance by 3rd party assurance providers, and endorsement through our implementing partners. We publish our data to be transparent, accountable, and engage with our stakeholders in a different, new kind of dialogue.

	Cumulative baseline since 2014	2016	2015	2014
 Make crops more efficient¹				
Total number of reference farms		1,039	1,062	860
Total number of benchmark farms		2,694	2,586	2,738
Average increase on reference farms ² :				
– Land productivity		1.2%	1.9%	–
– Land productivity of smallholders		8.0%	–	–
– Nutrient efficiency		1.5%	–	–
– Pesticide field application efficiency		-16.2%	–	–
Average increase on benchmark farms ² :				
– Land productivity		-2.6%	–	–
– Land productivity of smallholders		1.6%	–	–
– Nutrient efficiency		5.3%	–	–
– Pesticide field application efficiency		-19.3%	–	–



Find more details online at
www.data.syngenta.com

	Cumulative baseline since 2014	2016	2015	2014
 Rescue more farmland				
Hectares of benefited farmland (m)	4.3	1.9	1.6	0.8
 Help biodiversity flourish				
Hectares of benefited farmland (m)	4.9	3.3	0.9	0.7
 Empower smallholders				
Smallholders reached (m) ³		16.6	17.2	13.8
 Help people stay safe				
People trained on safe use (m)	17.2	6.8	5.7	4.7
– Of which: % of smallholders	71%	68%	71%	74%
Countries with established Syngenta product toxicovigilance programs		100	100	100
– Crop Protection sales represented		94%	93%	93%
 Look after every worker				
Suppliers included in fair labor programs ⁴		82%	–	–
Syngenta seed producing countries included in Syngenta Fair Labor Program ⁵		41%	33%	20%
Seed supply farms included in Syngenta Fair Labor Program		82%	84%	53%
– Of which: farms in Fair Labor Association (FLA)'s audit scope		62%	69%	100%
– Of which: seed supply farms monitored ⁵		18%	–	–
Chemical suppliers included in Supplier Sustainability Program ^{5,6}		67%	–	–
HSE audits at chemical suppliers ⁷		67	84	72
HSE audits at formulation, fill and packaging suppliers and seed toll manufacturing ⁷		48	34	74
HSE audits at warehouse/logistics service providers		137	118	156
Commercial flowers farms with valid GlobalG.A.P. certification ⁵		73%	–	–
Commercial flowers farms with valid G.R.A.S.P. assessment ⁵		24%	–	–

1 Reference farms were selected by Syngenta and are recommended to use Syngenta products and follow optimized protocols. Benchmark farms were randomly selected by a third-party research agency and represent grower practice. Reference and benchmark farms are grouped in clusters. A cluster presents homogeneous agro-climatic conditions and contains reference and/or benchmark farms with similar grower characteristics

2 Policy on land productivity reporting was revised in 2016. Starting 2016, instead of outlining the distribution of percentage increases in land productivity, nutrient efficiency and pesticide field application efficiency on a cluster basis, we are representing the corresponding percentage increases as global averages based on full-year harvest data. The change is to ensure consistent progress measurement while allowing better readability. Figures are compared to baseline 2014

3 Number of smallholders reached through sales per year
4 New KPI introduced in 2016 to capture overall participation of seed supply farms, chemical suppliers and commercial flowers farms in fair labor programs
5 New KPI introduced in 2016
6 Includes only chemical suppliers categorized as posing a high or medium sustainability risk
7 Policy on HSE audit reporting was revised in 2016. Starting 2016, HSE screening assessments are excluded

Keep up to date with The Good Growth Plan

Throughout the year, we provide updates on The Good Growth Plan website.

There, you'll find more information about each commitment as well as a range of case studies from the field. Visit: www.goodgrowthplan.com

To find out more about our approach to open data or to access the files, visit: www.data.syngenta.com

Bringing plant potential to life

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WE SUPPORT