

MONSANTO 2015 SUSTAINABILITY REPORT





WORKING TOGETHER, it's well within our reach. A place where all people have access to balanced meals and better tomorrows. A healthy planet that can nourish and sustain all forms of life. But getting there means taking on major challenges that no one can overcome alone.

As we take decisive action and continue to embed sustainability into our business, we also work with our collaborators and partners to cultivate meaningful change. From the planting of ideas to the harvesting of results, we're striving to make sustainable agriculture a positive force. Not just for today, but for generations to come.



MESSAGE FROM HUGH GRANT

Dear Stakeholders,

Sustainability is a journey that presents a constant but welcome challenge: how can we push ourselves to achieve even more? How do we feed a growing planet in a changing climate?

These are tough questions, and we must collaborate to find answers. We grow better together.

At Monsanto, we have deep expertise in a range of topics. But we're certainly not experts on everything. That's why we work with farmers, researchers, nonprofit organizations, universities, NGOs and other businesses to share expertise and ideas. In this year's report, we're pleased to feature perspectives from some of our collaborators on critical issues facing agriculture.

In December 2015, we announced our intention to make our operational footprint carbon neutral by 2021. And, more importantly, we rolled out a vision to help farmers build upon the great work that they've already achieved and someday drive carbon neutral crop production on farms all over the world. I think 2015 was a tipping point in global efforts to address climate change. The Paris Agreement and related efforts drove home the point that we all need to work together to address this issue. Monsanto is proud to be a small part of that.

Monsanto is also a co-chair of the Climate Smart Agriculture (CSA) working group of the Low Carbon Technology Partnerships initiative led by the World Business Council for Sustainable Development. The CSA aims to make more food available, strengthen the climate resilience of farming communities and reduce greenhouse gas emissions from commercial agriculture.

We're using data science to leverage information about seeds, soil and weather to help farmers use resources more efficiently and raise better harvests, improve their livelihoods and their efforts to steward their land. We're providing information and answering questions about the safety of our products, particularly when those skeptical of modern agriculture raise questions.

Monsanto recently advanced important sustainability goals. We've increased irrigation efficiency in our seed production business and curbed our operational greenhouse gas emissions intensity in our crop protection business. And we became the first company to partner with the National Fish and Wildlife Foundation's Monarch Butterfly Conservation Fund, making a multimillion-dollar commitment to support efforts to benefit monarch butterflies.

2015 also presented some challenges.

Depressed commodity prices have been hitting companies in many different sectors, including agriculture. This economic reality

meant the necessary separation of some of our employees and the suspension of some planned work. As a company in the business of helping farmers, when their business hurts, ours does too. But I'm confident that we have a sound plan for moving forward.

Monsanto will continue working hard to become a more sustainable company. We committed to reporting in accordance with the Global Reporting Initiative and supporting the recently released United Nations Sustainable Development Goals. We remain committed to the Ten Principles of the United Nations Global Compact, filing our Communication Progress and taking affirmative actions to address these critical areas.

All things considered, this was a pivotal year in our sustainability journey. We've taken decisive action on climate change, and we're making real progress against our commitments. I'd like to thank the thousands of employees, farmers and partners who made that possible.

Sincerely,

Hugh Grant
Chairman of the Board
and Chief Executive Officer

EXECUTIVE SUMMARY

MONSANTO'S APPROACH TO SUSTAINABILITY

Our long-standing commitment to sustainability is embedded in our core business strategy, operations and products as evidenced by our progress against our goals and commitments. We will continue to strive to be best in class in these areas and demonstrate our commitment to sustainability and agricultural innovation. We embrace continuous improvement as the path forward to becoming a more sustainable company.

As we look back on our progress over the last year, our efforts can be categorized in three broad areas: PEOPLE, PLANET and our COMPANY, as summarized in the following pages.

Our approach encompasses these key principles:

Act	Ethically
and	Responsibly

Drive Agricultural Innovation

Improve Food and **Nutrition Security**

Advance Product Stewardship

Embrace Collaboration and Transparency

Preserve and **Advance Biodiversity**

Create a Great Work Environment

Engage Communities and Society

Reduce our **Operational Footprint**













HELPING TO ENSURE FOOD AND NUTRITION SECURITY

Expanding Water Efficient Maize for Africa: Forty conventional DroughtTEGO™ hybrids were approved for commercial release in Kenya, South Africa, Tanzania and Uganda in this multi-stakeholder partnership. Farmers harvested 20 to 35 percent more grain under moderate drought conditions using DroughtTEGO™ hybrids, compared to the seed they historically planted. (Page 27)

Grow Asia: As part of World Economic Forum's Partnership for Indonesia Sustainable Agriculture, corn harvest in fall 2014 delivered approximately \$250 more income and 14 percent more grain per hectare when compared to previous harvests. (Page 29)

Vietnam's Rice-to-Corn Crop Rotation: To improve farmer livelihoods during a period of decreased rice demand, the Vietnamese Ministry of Agriculture and Rural Development selected our DEKALB® Cultivation Rice-to-Corn Rotation Protocol. In the first few months.

farmers converted 2.200 hectares from rice to corn, increasing their income by up to 400 percent. The protocol improved water efficiency and reduced the use of pesticides and fungicides, while reducing labor and other costs by as much as 80 percent. (Page 29)

Smallholder Farmer Resources: Providing information and training to smallholders is a priority of our Mobile Farm Care initiative, which has 3.8 million farmers enrolled. (Page 30)

Engaging on Health and Nutrition: We are in dialogue and sharing insights with food and nutrition leaders through the Leaders Engaged in Advancing Dialogue Network. (Page 32)

REACHING OUT TO COMMUNITIES

Staking the Future on STEM Education: We supported the Feed, Nourish, Thrive career resources campaign and the Nourishing 9 Billion Net Impact university outreach program. The America's Farmers programs

sponsored by the Monsanto Fund provided education grants to 164 schools and scholarships to 352 students. (Page 34)

Taking a Global Approach to Community Health and Safety: From organizing disease prevention seminars to distributing first-aid kits, our sites implement programs to tackle community issues. Our Off-the-Job Safety efforts reached over 1.3 million people globally – up 27 percent from 2014. (Page 36)

FORGING THE WAY IN HUMAN RIGHTS

Our Human Rights Policy is informed by the United Nations Universal Declaration of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. One hundred percent or 30,732 of our seed supply and labor provider contracts contained human rights clauses. (Page 48)



MITIGATING AND ADAPTING TO CLIMATE CHANGE

Fighting Climate Change in Our Own Backyard: We made significant progress in reducing our crop protection greenhouse gas emissions intensity by 16 percent against our 2010 baseline and are 73 percent of the way to our goal. (Page 52)

Helping Others Adapt to and Mitigate Climate Change: With external experts, Monsanto has developed carbon neutral crop production models to share broadly in the hope that the crop production sector could have a positive impact on climate change. (Page 53)

Applying Data Science to Feed a Growing Population: The Climate Corporation's integrated solutions platform leverages data science and digital tools like the Nitrogen Advisor to aid farmers. (Page 57)

ENSURING ACCESS TO FRESH WATER

Using Water More Efficiently: We increased our irrigation water application efficiency by 9 percent compared to our 2010 baseline through a pilot seed production program using advanced irrigation management techniques. (Page 58)

Mapping Water Risks: Through our water-risk assessment, 14 facilities were determined to be located in areas of high risk, representing less than 0.3 percent of our total water withdrawal. We are developing plans to further mitigate our water risk. (Page 59)

BIODIVERSITY: PRESERVING SUSTAINABLE LANDSCAPES

Making the Connection - Agriculture and Biodiversity: We've been working with Conservation International to preserve and restore critical forests in Brazil and develop the Sustainable Agriculture Landscape Program in Indonesia to help farmers grow more food on the same amount of land, reducing the motivation to turn forests into cropland. (Page 61)

Exploring the Benefits of Healthy Soil:

Monsanto has invested in soils research through the Soil Health Partnership, Resilient Economic Agricultural Practices initiative and the Agronomic Science Foundation to better understand healthy soils and the practices that promote them. (Page 65)

Heightening Honey Bee Health:

We continue to engage in the Honey Bee Health Coalition and its Bee Healthy Roadmap and Forage & Nutrition Working Group to improve pollinator health. (Page 67)

Researching Natural Solutions for Plant Health and Pest Control: Our Agricultural Biologicals research platform includes the BioAg Alliance partnership with Novozymes, which uses microbes to improve plant and soil health and protect against pests, and the BioDirect™ technology product pipeline, which taps into natural processes for pest control. (Page 70)



OUR CORPORATE GOVERNANCE FRAMEWORK

Sustainability and Corporate Responsibility Committee (SCRC): The SCRC reviews the company's sustainability goals and reporting, meets periodically with stakeholders to hear external perspectives and investigates significant emerging issues. (Page 78)

Driving Ethical Conduct and Corporate Citizenship Throughout Our Business: Through our global Business Conduct Office, we implement ethics and compliance initiatives and directives. In 2015, we addressed a total of 393 inquiries. (Page 80)

Political Contributions: The Center for Political Accountability ranked Monsanto and several other companies number three out of 500 companies included on the CPA-Zicklin Index. (Page 81)

ADDRESSING CRITICAL ISSUES

Stewarding Product Safety: Our seed and crop protection products are subject to our Life Cycle Stewardship Activities Management Process to ensure their safety and integrity, from gene discovery and plant development through seed production, marketing, distribution and discontinuation. In 2015, 20 product and technology stewardship reviews and 488 field trial compliance and trait quality corporate audits were performed. (Page 83)

Supporting the Science on Glyphosate: After the International Agency for Research on Cancer (IARC) panel classified glyphosate in Category 2A ("probably carcinogenic to humans"), Monsanto asked a panel of 16 experts to review IARC's assessment. They concluded "none of the results from a very large database, using different methodologies, provides evidence of, or a potential mechanism for, human carcinogenesis." (Page 87)

Summarizing Our View on Food Labeling: As a company involved in one of the first steps of food production, we are one of many stakeholders involved in the dialogue about labeling. We support the voluntary labeling of food products containing ingredients derived from GMOs, as well as a federal approach to food labeling. (Page 88)

WORKING WITH OUR SUPPLY CHAIN

We launched our supplier sustainability risk assessment process, evaluating the economic, environmental and social profiles and behaviors of key suppliers. Monsanto will use these supplier profiles to enhance our relationship management efforts, assess opportunities and risks, and develop supplier specific plans that incorporate best practices. (Page 90)

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WEARE MONSANTO

Pursuing a broad range of sustainable agriculture solutions to help nourish our growing world.

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Helping make balanced meals more accessible for everyone on the planet and improving lives for farmers, employees, consumers and communities.

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PLANET

Balancing agricultural and societal demands with environmental resources through solutions that help farmers grow crops more efficiently.

COMPANY

Placing high ethical standards, effective corporate governance, responsible product stewardship and transparent reporting at the center of the way we operate our business.

GUEST CONTRIBUTORS AND COMMENTATORS

- Nguyen Hong Lam Farmer in Xuan Loc District, Dong Nai Province, Vietnam
- Amy Myrdal Miller, MS, RDN, FAND President, Farmer's Daughter® Consulting
- Dr. Chuck Rice Distinguished Professor, Kansas State University and an author of the Intergovernmental Panel on Climate Change (IPCC) report
- Peter Bakker President & CEO, World Business Council for Sustainable Development
- Fitri Hasibuan Project Manager, Conservation International Indonesia
- Nick Goeser, Ph.D. Director, Soil Health Partnership and Manager of Soil Health and Sustainability, National Corn Growers Association



We are more than 20,000 employees committed to pursuing a broad range of sustainable agriculture solutions to help nourish our growing world.

We produce seeds for fruits, vegetables and key crops – such as corn, soybeans and cotton – that help farmers have better harvests while using water and other important resources more efficiently. We work to find sustainable solutions for soil health, help farmers use data science to improve farming practices and conserve natural resources, and provide crop protection products to minimize damage in the field from pests and disease.

Through programs and partnerships, we collaborate with others to help tackle some of the world's biggest challenges. We are a diverse collection of food enthusiasts, moms and dads, innovators, botanists, farmers and thinkers all striving for the same thing: helping to make balanced meals - of fruits, vegetables and protein – more accessible to all and doing it in a way that helps protect the environment so that everyone wins.

OUR 11 **PRODUCTS**

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2015 Revenue:

\$15B

See our <u>2015 Form 10-K</u> for Complete Financial Information

20K+

SEE Employees Globally

See our 2015 Form 10-K for Details

ST./
LOUIS,
MISSOURI
Global Headquarters

Global Locations with Significant Operations:

400 + FACILITIES in 57 COUNTRIES





OUR PRODUCTS

We are dedicated to providing farmers high-quality crop production products and services. Our seeds, crop protection products and data science offerings are most effective when used in combination as part of an integrated system approach.

Row Crop Seeds

We develop and deliver systems that enable seeds to grow into stronger, more resilient crops that can produce better harvests while using resources more efficiently.

Throughout the history of civilization, plant breeding innovations were made as a solution to a problem. Even indigenous farmers who worked the fields more than 10,000 years ago understood that in order to survive, they needed plant varieties specifically adapted to their conditions. Crop selection that was done by early farmers has evolved into the science of plant breeding. Today, plant breeders increasingly understand the genetic characteristics and focus on developing plant varieties that have greater tolerance to adverse weather conditions and disease resistance than previous generations.



Through scientific development and hightechnology applications, we can more quickly and effectively identify and select the traits that bring improved options to farmers.

The science of plant biotechnology and its products, commonly referred to as genetically modified organisms (GMOs), have helped develop highly effective solutions for farmers. Biotechnology applied in agriculture and at Monsanto strengthens plant resistance to insects, adverse weather conditions and weed pressures, and enables farming practices that are better for the environment.

Our row crop seed brands include DEKALB®, Asgrow®, Deltapine®, Agroeste®, Channel®, La Tijereta[®], WestBred[®] and others.

THE PLANT BIOTECHNOLOGY PROCESS

Desired trait of a living thing is identified



Beneficial trait is adapted to a new plant





Plant is tested for food and environmental safety and nutritional value





New plant is better able to thrive



Vegetable Seeds

We combine traditional plant breeding with scientific techniques to create more flavorful and attractive vegetables that can better withstand nature's challenges and provide consumers with visually-appealing, great-tasting vegetables on their plates.

Vegetables that look, feel and taste appealing encourage consumption of these nutritious foods. And vegetables that stay fresh longer can reduce food waste. Some of our seeds produce vegetables with enhanced nutritional profiles.

More than 98 percent of our vegetable seed research and development investment is in conventional plant breeding. Currently, two of our vegetable crops include biotechnology innovations: sweet corn and squash. In both cases, these innovations were used because traditional methods of pest and disease control were not as effective as a biotech solution. Our vegetable seed brands include Seminis® and De Ruiter®.

Crop Protection

At any stage, seeds and plants are at risk from insects, weather, poor soil conditions, weeds and disease. We work to create solutions to help protect plant health and minimize environmental impact.

Our current crop protection offerings include Roundup® branded herbicides and Acceleron® seed applied solutions, while our Agricultural Biologicals R&D platform includes understanding, applying and deploying soil microbes and other products derived from nature. As part of both the joint BioAg Alliance with Novozymes and through our own BioDirect™ technology research pipeline, we use naturally occurring processes to help control weeds, insects and viruses. We will continue to offer a range of sustainable chemistry solutions to help farmers protect their crops.

Data Science

We offer data science-based digital tools to provide insights that support farmers as they make decisions throughout the growing season.

The Climate Corporation, a division of Monsanto, offers Climate FieldView™, an integrated platform that helps farmers sustainably increase productivity with digital tools. The platform brings together data science, predictive analytics, integrated seed science, field science, local weather monitoring and data modeling to develop customized insights both field by field and in specific locations within a given field.

In addition to helping farmers have better harvests, many of the insights provided by Climate FieldView™ enable them to improve profitability by making better informed operating and financing decisions and use resources like nutrients, pesticides and water more efficiently. So it's good for the farmer and for the environment.



AGRICULTURAL INNOVATION: OUR APPROACH TO SUSTAINABILITY

Our long-standing commitment to sustainability is embedded in our core business strategy, operations and products as evidenced by our progress against our broad-ranging commitments. We are focused on how Monsanto can contribute to the 2030 Development Agenda of the United Nations and advancement of the Sustainable Development Goals (also known as the Global Goals) by helping make balanced meals accessible to all while using resources more efficiently. Driving sustainable agriculture requires a wide range of approaches and resources. At Monsanto, we collaborate with farmers, researchers, nonprofit organizations, universities, NGOs and many others to advance the principles of sustainable agriculture to help feed a growing population.

Monsanto is committed to sustainability. Our approach encompasses these key principles:

Act Ethically and Responsibly – Ensure effective corporate governance, strive for ethical behavior from all of our employees and drive sustainable practices within our supply chain.



- Advance Product Stewardship -Work to ensure that our products are developed and used in a way that optimizes productivity while minimizing risks and environmental impacts.
- Create a Great Work Environment -Provide employees with the skills, benefits and protections they need to move our company and industry forward and grow professionally. Embrace inclusion and diversity.
- Drive Agricultural Innovation -Provide farmers with the products and processes they need to reap the best possible harvests while using resources as efficiently as possible to combat and adapt to climate change and freshwater scarcity.

SUSTAINABLE AGRICULTURE

We believe sustainable agriculture means growing the right amount of food on less land using resources in an efficient manner that preserves natural ecosystems, addresses water scarcity and climate change, improves farmer livelihoods and benefits society. This approach is often referred to as sustainable intensification.





PEOPLE



- Embrace Collaboration and Transparency Work with others to integrate and act on wide ranging expertise and perspectives. Elicit feedback and encourage questions about our company and its products.
- Engage Communities and Society Continue to grow positive relationships with the communities where we do business and with society at large. Preserve and respect human rights and dignity.
- Improve Food and Nutrition Security Spearhead and participate in initiatives that bring farmers the tools and skills they need to grow the right amount of food. Engage food and nutrition leaders in ongoing dialogue.
- Preserve and Advance Biodiversity Partner with NGOs and others to promote sustainable practices and land use to benefit farmers, communities and nature and find solutions for protecting beneficial species like honey bees and monarch butterflies.
- Reduce Our Operational Footprint -Look for opportunities to cut greenhouse gas emissions, water use and waste throughout our business, including with our contract growers.

Governing and Managing Our Sustainability Commitment

Our sustainability commitment starts at the top with the Sustainability and Corporate Responsibility Committee of our board of directors, which reviews and monitors our sustainability performance. Operationally, our Executive Sustainability and Product Stewardship Committee assesses global challenges and opportunities, sets direction, reviews goals and commitments, and aligns the resources needed to achieve them.

Our Office of Sustainability is a cross-functional team of employees who have day-to-day responsibilities in core areas of sustainability including stakeholder engagement, food and nutrition security, environmental management, health, safety, supply chain, global policy, business conduct and human rights. The Office is responsible for aligning and embedding sustainability in the company across functions, operations and processes in all regions of the world, and is accountable to the Executive Sustainability and Product Stewardship Committee. The Office also works closely with our Global Business Operations Leadership Team and Executive Team.

SUSTAINABILITY GOVERNANCE AT MONSANTO





Goals and Progress

As we further integrate sustainability into our company operations, we will continue to set both internal and broader external goals to support the advancement of sustainable agriculture.

Monsanto's Operational Footprint

CARBON NEUTRAL OPERATIONS



Metric Ton

Make our operational footprint carbon neutral by 2021 (commitment announced in December 2015)

GREENHOUSE GAS INTENSITY

Reduce greenhouse gas emissions from our crop protection operations by 22 percent (per pound of active ingredient) by 2020, relative to our 2010 baseline.





IRRIGATION WATER APPLICATION EFFICIENCY

Increase irrigation water application efficiency across our global seed production operation by 25 percent by 2020, compared to our 2010 baseline.



Yields



Monsanto's External Goals and Progress

IMPROVE HARVESTS

Help farmers double yields by 2030 from 2000 levels for corn, soybeans, cotton and canola.

Based on population growth predictions, Monsanto made a commitment in 2008 to develop improved seeds and agronomic practices to help farmers double yields by 2030 from 2000 levels for corn, soybeans, cotton and canola in countries where farmers have access to the full complement of tools for these crops, including plant breeding, biotechnology and agronomic management.

According to the United States Department of Agriculture Foreign Agricultural Service, significant progress has been made against these aggressive goals, especially in countries of high technology adoption. Due to factors such as weather and individual country policies, worldwide crop yields are not currently on pace at this point to double yields by 2030 to meet the anticipated demand for food.

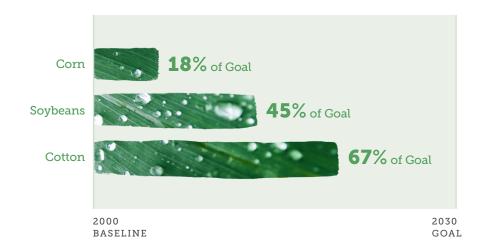


Yield-gain percentages are based on a three-year rolling average. Data source: USDA Production, Supply and Distribution View; analysis by Monsanto. For more information on this goal see Our Commitments to Sustainable Agriculture white paper.

CONSERVE RESOURCES

Help farmers use one-third fewer key resources per unit of output to grow crops.

Monsanto made a commitment in 2008 to develop improved seeds and agronomic practices that by 2030 would help farmers use one-third fewer key resources than in 2000 per unit of output to grow corn, soybean and cotton. We recognize these improvements will be made by farmers who utilize new technologies and better management practices provided from a diverse set of partners, including but not limited to Monsanto. Cotton is ahead of pace, soybeans are on pace, while corn is tracking off pace.



Resource reduction percentages are based on a three-year rolling average.

Source: Monsanto internal estimates. Reflects U.S. results only due to limitations on reliable data elsewhere. Key resources include land use, irrigation water, energy, soil loss and greenhouse gas emissions. For more information on this goal see Our Commitments to Sustainable Agriculture white paper.

One-third

Fewer Kev Resources

Monsanto's External Goals and Progress

USE NUTRIENTS MORE EFFICIENTLY

Help farmers use nutrients more efficiently and curb greenhouse gas emissions on 1 million acres in the United States by 2020.



2014 BASELINE 2015 **PROGRESS** 2020 GOAL

200 K 1 M



IMPROVE LIVES

Acres

Improve the lives of 5 million resource-poor farm families by 2020.

4.2 M Smallholder Farmers Adopting Biotech

\$**5.62** B in Additional Net Income as a Result of **Technology Adoption**

Based on global meta-analysis data compiled by <u>ISAAA</u> and <u>PG Economics</u>.

CARBON NEUTRAL CROP PRODUCTION



Drive carbon neutral practices (Page 53) (commitment announced in December 2015)

MONARCH BUTTERFLY

Expand outreach and habitat improvement (Page 68)

100 K

Milkweed Plants for Planting Where Quality Habitat is Needed

100 K

Farmers Reached with Best **Management Practices** for Monarch Habitat

HONEY BEE HEALTH



Multiple outreach and research goals (Page 67)

STAKEHOLDERS



Identifying Material Issues

In 2015, Monsanto worked with Business for Social Responsibility (BSR) to identify the sustainability issues that matter most to the success of our company and to our many stakeholders, both internal and external. This process, known as a materiality assessment, is designed to inform our sustainability strategy, business actions and the content of this report. This materiality assessment refreshes and builds upon a similar process we undertook a few years ago. For a detailed description of the process and its outcomes, see Page 92.

MATERIAL TOPIC/ DEFINITION

THE ISSUES LISTED HAVE BEEN IDENTIFIED AS MATERIAL TO MONSANTO OR OUR STAKEHOLDERS BECAUSE THEY RELATE TO THE TOPICS LISTED BELOW

Business conduct and ethics **Business continuity** Product Safety and Stewardship – Developing and stewarding products and Human health Risk mitigation technologies that meet or exceed regulatory requirements relative to safety, **Environmental impacts** Reputation human health and the environment. Community safety License to operate Product durability Innovative Technologies and Products – Responsibly applying innovation Business success Harvests to technologies, products and services that help farmers have better harvests License to operate Farmer livelihoods and use resources efficiently. Integrated business solutions Environmental impacts Environmental impacts Risk mitigation Climate Change Mitigation and Adaptation – Developing technologies Operational footprint Human health and products that help farmers mitigate and adapt to climate change, Food and nutrition security License to operate helping manage the impacts of climate change and curbing our operational Harvests Innovation greenhouse gas footprint. **Business continuity** Larger societal impacts **Business success** Harvests Sustainable Chemistry – Developing socially and environmentally responsible weed, License to operate Farmer livelihoods insect and disease management solutions and agronomic practice improvements Risk mitigation Environmental impacts for use in crop production. Integrated business solutions Biodiversity

MONSANTO



MATERIAL TOPIC/ DEFINITION

THE ISSUES LISTED HAVE BEEN IDENTIFIED AS MATERIAL TO MONSANTO OR OUR STAKEHOLDERS BECAUSE THEY RELATE TO THE TOPICS LISTED BELOW

	MONSANTO	STAKEHOLDERS
Water Consumption and Management – Applying innovation and best practices to protect, conserve and manage water resources related to our operations, contract seed production and crop production.	 Essential product input Operational footprint Sufficient water access Energy/cost to move water Climate change adaptation Risk mitigation 	 Water access Water as a human right Impacts and risks of drought Essential product input Environmental impacts Climate change adaptation
Business Practices and Competition – Following methods or processes to deliver products and services that meet the standards of customers based on value, quality, service and fair competitive market practices.	 Reputation Regulatory approval Business success Customer development and retention 	 Customer choice Fair competition Innovation Farmer livelihoods Food and nutrition security Community vitality
Global Hunger and Nutrition Security – Helping farmers generate better harvests through a broad range of solutions and partnerships to help nourish a growing world population.	Business successProduct developmentInnovationClimate change adaption	 Harvests Human health Farmer livelihoods Rural development Climate change adaptation
Business Ethics and Transparency — Operating in a transparent, compliant, ethical and socially responsible way.	 Reputation License to operate Risk mitigation Employee retention and engagement Corporate governance and citizenship 	Fair competitionKnowledge of company practicesCorporate governanceTransparency
Positive Relationships with Local Communities and Society – Enhancing the communities in which Monsanto operates and engaging in philanthropy, STEM education and employee volunteerism for the betterment of society.	 License to operate Facility management Business continuity Employee engagement Future workforce Corporate citizenship Community engagement and support 	 Community safety, vitality and development Human rights Educated public Humanitarian and disaster relief

PEOPLE



MATERIAL TOPIC/ DEFINITION

THE ISSUES LISTED HAVE BEEN IDENTIFIED AS MATERIAL TO MONSANTO OR OUR STAKEHOLDERS BECAUSE THEY RELATE TO THE TOPICS LISTED BELOW

	MONSANTO	STAKEHOLDERS
Regulatory Approval Systems – Executing robust product assessments to support receipt of product approvals, ensuring compliance with regulations and managing conditions of registrations.	 Product development Business success Business growth Business continuity License to operate 	 Consumer protection Environmental protection Economic development Food and nutrition security
Smallholder Farmers – Engaging with smallholder farmers to help them overcome challenges, leading to better harvests, improved livelihoods and resource access.	Business successPoverty eradicationReputationMarket opportunity	 Farmer livelihoods Product access Food and nutrition security Community development
Land Use and Deforestation – Ensuring soils and forests thrive by utilizing, encouraging and enabling the use of best management practices, products and services by farmers.	ReputationEcosystem servicesClimate change mitigationBiodiversitySustainable intensification	 Climate change mitigation Environmental impacts Biodiversity Water quality and access Land use changes
Soil Health – Promoting land stewardship through the application of effective and innovative farm practices to enhance crop production today and ensure its viability for future generations.	 Harvests Climate change mitigation and adaptation Environmental impacts Sustainable intensification 	 Harvests Climate change mitigation and adaptation Environmental impacts Farmer livelihoods
Human Rights – Supporting the full realization of human rights of our employees and business partner employees throughout our value chain.	Business conduct and ethicsLicense to operateReputationRisk mitigation	Fair conditions and payEliminating child laborEliminating forced labor
Patents and Plant Variety Rights – Delivering innovation with support of intellectual property, patent and plant variety protection rights.	 Business success Innovation Risk mitigation Collaboration License to operate Market development 	 Access to products Economic growth Morality of patenting life Farmer choice



MATERIAL TOPIC/ DEFINITION

THE ISSUES LISTED HAVE BEEN IDENTIFIED AS MATERIAL TO MONSANTO OR OUR STAKEHOLDERS BECAUSE THEY RELATE TO THE TOPICS LISTED BELOW

	MONSANTO	STAKEHOLDERS
Talent Management, Diversity and Benefits – Attracting, retaining, developing, incenting and empowering Monsanto employees, promoting professional growth, leveraging the power of diversity and creating a great work environment.	 Business success and continuity Innovation Diverse perspectives Employee engagement, development and well-being 	Economic growthIncrease skilled workforceInclusion and diversity
GMO (genetically modified organism) Labeling – Labeling food products that contain ingredients derived from crops grown with GMO seeds.	License to operateReputationBusiness continuity	Heightened societal interestHealth and safety perceptions
Biodiversity – Preserving ecosystems where Monsanto and its farmer customers operate by promoting sustainable landscapes, understanding environmental challenges associated with crop production and supporting monarch butterfly habitat development and honey bee health.	Business successReputationLicense to operateSoil and water qualityPollinators	 Environmental impacts Community vitality Health and conservation of species Soil and water quality
Occupational Health, Safety and Wellness – Ensuring a healthy, safe and secure workplace that promotes well-being.	 Business success License to operate Recruiting and retention Employee well-being and engagement Risk mitigation Cost savings 	 Individual and community health and wellness Health system burdens Education Livelihoods
Data Management and Access – Ensuring responsible management of farmer, business partner, employee and company data while expanding farmer access to digital agriculture solutions.	InnovationBusiness successRisk mitigationCustomer relationships	Data ownership and privacyAccess to digital servicesFarmer livelihoods
Political Spending – Managing political actions and contributions responsibly, transparently and in alignment with Monsanto's policies.	Business conduct and ethicsBusiness successReputation	TransparencyFair competitionAnti-corruption



Working Collaboratively and Transparently

As more and more people join the conversation about food, we have a responsibility to help make relevant information available to them. Based on feedback from stakeholders, we've taken significant steps to engage in conversations about how food is grown and gets from farm to table, as well as the role we play along the way.

We engage with stakeholders that have interest in agriculture production, water, soil health, human rights, climate change, food and nutrition security, biodiversity, GMO labeling, science and technology, business practices, innovation, inclusion and diversity, youth development, community health and other topics related to our business.

We interact with organizations and individuals on an ongoing basis as part of regularly planned visits, technical seminars, conferences and updates. Although the frequency of our engagement varies, the intent to stay engaged in areas of mutual interest is foremost in our minds. The groups identified throughout the report provide insight into how they see our role in society.

We have also developed and co-sponsored online forums where consumers can ask questions about where their food comes from and other topics of interest. These include The Conversation, La Conversación, GMO Answers and Hablemos Claro.

STAKEHOLDERS

The table below provides a sampling of the various stakeholders with whom we engage.

Advocacy Groups	African Agricultural Technology Foundation (AATF) • Climate Leadership Group • Clinton Global Initiative (CGI) • Field to Market Alliance • Honey Bee Health Coalition • Institute for Sustainable Agriculture (IAD) • Soil Health Partnership • Sustainability Consortium • World Business Council for Sustainable Development (WBCSD) • World Economic Forum (WEF) New Vision for Agriculture
Industry Groups	American Production and Inventory Control Society (APICS) • Biotechnology Innovation Organization • Confederação Nacional da Indústria (CNI) • Council of Supply Chain Management Professionals (CSCMP) • CropLife International • International Seed Federation • National and Regional Seed Industry Associations • US-ASEAN Business Council, Inc.
Diversity Groups	Mid-States Minority Supplier Development Council • Minority Business Development Agency • National Gay and Lesbian Chamber of Commerce (NGLCC) • National Minority Supplier Development Council • St. Louis Minority Business Council • Southern Regional Minority Supplier Development Council • United States Business Leaders Network • Veteran Business Resource Center • WEConnect International • Women's Business Development Center • Women Business Enterprise Council South • Women's Business Enterprise National Council • Women's Minority Business Development Agency Business Center Chicago

External Charters and Principles

Monsanto's policies and business activities are informed by a variety of external charters and principles. Some of these include:

- American Business Act on Climate Pledge
- Customs-Trade Partnership Against Terrorism (C-TPAT)
- International Labour Organization's Fundamental Principles and Rights at Work

- Privacy and Security Principles for Farm Data
- Sustainable Development Goals
- United Nations Global Compact (UNGC)
- UNGC CFO Water Mandate
- Universal Declaration of Human Rights
- U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) Principles
- WBCSD WASH Pledge



Inviting Conversation

In 2014, Monsanto launched its online discussion forum, The Conversation, followed by a Spanish language counterpart, La Conversación, in 2015. These forums are dedicated to addressing questions from anyone who has them. Here are 10 of the actual questions asked and answered on these sites, along with where you can find information on these topics in this report.

"How does Monsanto collaborate for a better life in society, and how does it protect people and the environment against negative effects?"

Pages 27-37; 48-50; 51-72

"If you have nothing to hide, why do you continue to spend millions of dollars to prevent GMO labeling?"

Page 88

"What is Monsanto doing to help 'balance' meals?"

Pages 27-33

"So is Monsanto doing anything to make up for the rapid destruction of the monarch butterflies?"

Page 68

"The WHO has just released a study confirming a positive link between cancer and glyphosate. Comments?"

Page 87

"Do you carry out any kind of action to eradicate hunger in Africa?"

Pages 27-29

"Why do you feel the need to own patents on seeds causing farmers to be unable to plant using their own seeds, why do this?"

Page 86

"How is Monsanto responding to the 'superweed' issue?"

Page 69

consumers fully understand the things they eat?"

Pages 51-72; 83

"What is Monsanto's position on helping

Pages 32-33

"Do your products

environment?"

pollute the



Earning Recognition

The people of Monsanto work hard to advance the company's sustainability vision. And while we don't do it for the external recognition, we appreciate it when received. Below are some of the recent honors we've received from third-party organizations.

People

- Great Place to Work Monsanto was recognized as an employer of choice in virtually every region where we operate. Monsanto was recognized on Great Place to Work's Top 25 World's Best Multinational Workplaces for the fourth straight year, where we were recognized for success in 12 countries.
- Great Place to Work's 50 Best Workplaces for Diversity - Great Place to Work and Fortune magazine have recognized Monsanto as number 30 on the 50 Best Workplaces for Diversity.
- **Human Rights Campaign Corporate Equality Index** – Monsanto was recognized by Human Rights Campaign with a perfect score of 100 on its 2016 Corporate

- Equality Index on best practices for lesbian, gay, bisexual and transgender (LGBT) workplace policies and efforts.
- DiversityInc Monsanto ranked number 43 on the 2015 Top 50 Companies for Diversity. It is our eighth consecutive year on the list.
- Hispanic Network and Black **EOE Journal** – Monsanto was recognized as a Top Diversity Employer by Hispanic Network magazine and Black EOE Journal. Monsanto was recognized on three lists as a Top Employer for Hispanics, African-Americans and LGBT people.
- Monsanto Mexico, Great Place to Work for Gender Equality – Monsanto Mexico ranked number 11 on gender equality for an environment that provides equal opportunities for decision making and development for females and males.
- Mexico Without Child Labor Award -Monsanto's Mexico sites in Los Mochis and Villagrán were recognized by the Secretaria del Trabajo y Previsión Social (STPS) department of the Mexican government for having fields free of child labor.



- Software Technology Parks of India (STPI) IT Export Award – In fiscal year 2015, Monsanto was recognized by the STPI for employing the highest percentage of differently-abled employees for the second consecutive year.
- Monsanto Thailand, National Best Safety and Occupational, Health and **Environment Award – Monsanto Thailand's** facility in Phitsanulok was recognized for its world-class environment, health, safety and security practices by the Department of Labor Protection and Welfare at Bitec Bangna, Bangkok.



Planet

- Wildlife Habitat Council Monsanto has 15 sites in the United States and Brazil that have been recognized by the Wildlife Habitat Council for their Wildlife at Work and Corporate Lands for Learning programs. Both programs recognize outstanding wildlife habitat management and environmental education efforts at corporate sites.
- Prairies for Tomorrow Award -Monsanto's facility in Muscatine, Iowa, received the Prairies for Tomorrow Award, given jointly by the Wildlife Habitat Council and Pheasants Forever for the execution of corporate wildlife habitat projects.
- **European Water Stewardship** Certificate - Monsanto Europe's facility in Antwerp is the first company in the chemical sector in Belgium to obtain a gold-level European Water Stewardship certificate, the highest recognition awarded by the European Water Partnership.
- Monsanto Indonesia. Sustainable Business Award – Monsanto Indonesia was recently awarded for Best Land Use, Biodiversity and Environment as

a result of the company's Sustainable Agriculture Landscape Partnership with Conservation International.

Company

- Newsweek Green Rankings -Monsanto ranked number 52 among U.S. companies and number 84 globally on the 2015 Newsweek Green Rankings, which rates the largest publicly-traded companies on overall sustainability performance.
- Corporate Responsibility Magazine 100 Best Corporate Citizens for 2015 -Monsanto ranked number 41 on the list based on performance in seven key areas of corporate responsibility. This is the sixth time Monsanto has been included on this list.
- Golden Peacock Award Monsanto was recognized as a winner of the Golden Peacock Global Award for Sustainability in 2015. Winners are selected from 1.000 entries from more than 25 countries.
- Malaysia National Corporate Ethics Award - Monsanto Malaysia was recognized by the Malaysian International Chamber of Commerce



- and Industry for serving as an ethical role model and supporting the government's anti-corruption policies.
- Monsanto Philippines, Department of Labor and Employment Awards -Monsanto Philippines was recognized for not engaging in child labor and not using products or materials produced through the use of child labor: and, for the seventh consecutive year, achieving zero lost time due to an accident.



Helping make balanced meals more accessible for everyone on the planet and improving lives for farmers, employees, consumers and communities.

At Monsanto, we're passionate about people. Our goal is to improve lives everywhere: for our employees, the farmers we work with and in the communities we touch around the world. In collaboration with a diverse group of public, private and nonprofit stakeholders, we're improving global food security and striving to eliminate hunger, malnutrition and poverty. We offer our employees a work environment that is safe and inclusive. And we're educating the next generation of leaders and investing in causes that make a genuine difference in people's lives.

HELPING TO ENSURE FOOD AND NUTRITION SECURITY

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- Grow Africa: Bringing Resources to Sub-Saharan Farmers
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HELPING TO ENSURE FOOD AND NUTRITION SECURITY

Helping make balanced meals more accessible to all is a complex undertaking that encompasses interdependent factors including crop production, access to inputs, distribution systems, agronomic knowledge, technology, access to capital and local customs.

One of the first major food security partnerships in which we engaged, Water Efficient Maize for Africa (WEMA), underscores the importance of working with global, regional and local partners to make a difference where it counts most - in the lives of people on the ground in their local communities.

Monsanto also plays an active role in the World Economic Forum's (WEF) New Vision for Agriculture and has done so since its inception. This global initiative engages business, government, civil society, farmers and development partners to achieve sustainable agricultural growth in the face of a growing world population. Monsanto is involved in two of WEF's regional partnerships, Grow Africa and Grow Asia (see Pages 28 and 29, respectively).



Expanding Water Efficient Maize for Africa

The WEMA project is a multi-stakeholder partnership that aims to improve food security and livelihoods among smallholder farmers in Sub-Saharan Africa by developing hybrid maize (corn) seed that uses water more efficiently and resists insect pests. In Africa, maize is the main source of food for more than 300 million people.

WEMA is led by the African Agricultural Technology Foundation (AATF), and funded by the Bill and Melinda Gates Foundation, the Howard G. Buffett Foundation and the United States Agency for International Development (USAID). Key WEMA partners include the

National Agricultural Research Institutes in Kenya, Mozambique, South Africa, Tanzania and Uganda; the International Maize and Wheat Improvement Center (CIMMYT); and Monsanto.

The WEMA partnership seeks to develop a pipeline of conventional and biotech seeds for African farmers under the brand DroughtTEGO™. The partnership makes DroughtTEGO™ seed variety licenses available to seed companies of all sizes, royalty free, to deliver these hybrid seeds to farmers.

In 2015, 40 conventional DroughtTEGO™ hybrids were approved for commercial release in Kenya, South Africa, Tanzania and Uganda, and 23 seed companies now license new hybrids royalty free and make them commercially available to African farmers. Farmers have





been able to harvest 20 to 35 percent more grain under moderate drought conditions using DroughtTEGO™ hybrids, compared to the seed they had historically planted.

While only conventional seeds have been available to African farmers through the WEMA partnership so far, WEMA plans to introduce four white maize biotech hybrids to address additional crop production challenges. The seed variety licenses are already available under the brand YieldGard® in other parts of the world, but it will take time to complete the regulatory approval process in Africa. The partnership's goal is to obtain approval to begin field trials and distribute seeds to smallholder farmers in future growing seasons.

In the meantime, additional conventional hybrids are expected to be approved for commercial release and seed-company licensing is ongoing to achieve WEMA's goal of improving food security and livelihoods for more than 25 million people in Sub-Saharan Africa.

Grow Africa: Bringing Resources to Sub-Saharan Farmers

The vast majority of farmers in Sub-Saharan Africa are women tending crops on small areas of land to provide for their families. These smallholder farmers face many challenges, like insects, disease and drought, which can mean the difference between having enough food for their children and village or not. Monsanto is involved in several initiatives to address these challenges as part of our Grow Africa commitment.

Agriculture First. Tanzania's economy is highly dependent on agriculture and the government has made it a national priority by establishing Kilimo Kwanza (Agriculture First), a program to achieve food security, poverty reduction and increased economic growth.

To advance these goals, the government designated the Southern Agricultural Growth

Corridor of Tanzania (SAGCOT) as the focus of new partnerships that aim to enable agricultural growth in this region. Monsanto has been a partner in SAGCOT since its start in 2010. Working with NGOs, farmer organizations, researchers and the Ministry of Agriculture, we're helping improve crop production systems and the maize and vegetable value chains in the region to improve food security.

Insect-Resistant Cowpea. Monsanto is continuing to support the efforts of the AATF, a not-for-profit organization working to help improve cowpea productivity.

Cowpea is an extremely important food grain legume in Africa's dry conditions. Nearly 200 million people consume this crop due to its quality protein content, and it's grown on more than 12.5 million hectares of land. However, a pest known as the Maruca pod borer can reduce harvests by 80 percent. Because most cowpea farmers lack access to effective insecticides, AATF is attempting to access specific genes to protect cowpea against the Maruca pod borer, facilitate licensing agreements and educate farmers on sustainable use of the insect-protected seeds.

In 2015, cowpea trials were planted in Burkina Faso, Ghana and Nigeria and harvest took



place from late October to January 2016. Additionally, AATF made progress toward commercialization by submitting regulatory applications in Ghana, Malawi and Nigeria. Moving forward, AATF hopes to expand field trials to additional countries and continue working to bring insect-resistant cowpea to the African marketplace, with our assistance.

Virus Resistant Cassava. Monsanto is continuing to partner with St. Louis-based Donald Danforth Plant Science Center. the National Crops Resources Research Institute in Uganda and the Kenya Agricultural Livestock and Research Organization on the Virus Resistant Cassava for Africa (VIRCA) project. Cassava is a nutrientrich root vegetable that serves as a dietary staple for 130 million people in East Africa. Unfortunately, the plant is susceptible to diseases like cassava brown streak disease (CBSD) and cassava mosaic disease (CMD).

Working with varieties that already provide some protection against CMD, the VIRCA project is using biotechnology to improve cassava's resistance to CBSD increasing the chance that farmers have abundant harvests. Field trials are currently underway, and the VIRCA team continues to work with government regulators who

will review improvements in, and safety of, the cassava varieties before they are made available to smallholder farmers.

Grow Asia: Improving Farmer Livelihoods

The Association of Southeast Asian Nations (ASEAN) region is home to 625 million people who face food and nutrition security as a constant threat. The ASEAN goal is to feed one of the world's youngest and fastest-growing populations through sustainable and efficient use of land and water resources by minimizing the impacts of, and the contributions to, climate change. We're engaged in several related initiatives as part of our Grow Asia commitment.

Vietnam. In recent years, demand for Vietnamese-grown rice has dropped dramatically, impacting the livelihoods of Vietnamese in the Mekong Delta. The Vietnamese government began helping farmers transition their rice paddy fields to corn and soybean fields, all while preserving the rice-growing ecosystem that is still important to Vietnam.

Our Monsanto Vietnam team introduced a rice-to-corn crop rotation concept in 2014



to assist farmers in growing both crops, while minimizing the impact to the environment. In 2015, our DEKALB® Cultivation Rice-to-Corn Rotation Protocol was selected as a preferred cropping system by the Vietnamese Ministry of Agriculture and Rural Development.

Working alongside the government, Monsanto trained 5,000 rice farmers on corn planting techniques. Within three months, farmers in two regions converted 2,200 hectares from rice to corn, increasing their income by up to 400 percent. The new crop rotation process also improved water efficiency and reduced the use of pesticides, fungicides, labor and other costs by as much as 80 percent.



If I have a chance to choose, I will choose the new corn hybrids, since they help me reduce labor. I will no longer worry about weeds and pests either



Nguyen Hong Lam Farmer in Xuan Loc District, Dong Nai Province, Vietnam

Indonesia. The WEF Partnership for Indonesia Sustainable Agriculture (PISAgro) addresses food security by increasing agricultural production and improving the welfare of smallholder farmers. The decadelong initiative aims to increase agriculture productivity by 20 percent, increase farmer incomes by 20 percent and decrease greenhouse gas emissions by 20 percent.

Together with Indonesian farmers, Bank Rakyat Indonesia, Cargill, and the Regional Government of East Java, Monsanto participated in a pilot project focused on maximizing corn crop productivity and providing farmers with access to financing and credit.

The first corn planted in June 2014 delivered approximately \$250 more income and 14 percent more grain per hectare by November 2014, when compared to previous harvests. Project partners are exploring options to extend the scope and scale of this initiative to additional corn farmers across Indonesia.

Philippines. The most recent WEF Grow Asia initiative that we're involved in kicked off in the Philippines in late 2014. The program, now in its planning phases, will focus on cassava, corn, coconut, coffee and fisheries. Project partners have determined priorities, reviewed standard operating procedures, formed working groups and conducted stakeholder mapping. The first activities on the ground are expected to take place in March 2016.

Providing Information and Training to Smallholder Farmers

Smallholder farmers, who make up about 90 percent of all farmers globally, are often challenged with rural isolation and limited agronomic resources. Monsanto is helping empower these farmers through partnerships like the Mobile Farm Care Initiative and smallholder training efforts in many parts of the world.

Smallholder Mobile Farm Care Initiative. Knowing that 70 percent of smallholder farmers have access to cellular telephones, Monsanto combined agronomic knowledge and mobile technology to bring free, relevant information and advice directly to farmers in the field to help them make decisions for a successful harvest.

The Mobile Farm Care Initiative evolved from the Dr. DEKALB Farm Care Service and similar information services for cotton and vegetable farmers that comprised the Monsanto Farm Advisory Services (MFAS) smallholder program. The original program launched in India in 2010 as a simple SMS-based program designed to work with conventional cellular phones typically owned by smallholder farmers. There are plans to introduce the program to Africa and South Asian nations in the future. Based on the increased adoption of "smart" mobile devices and rural Internet access, the Mobile Farm Care Initiative now features a database that includes weather, agronomy and commodity price services, making the program more robust, informative and interactive.

There are 3.8 million farmers enrolled and more than 90 percent of them say they are very satisfied with it. Farmers have reported experiencing benefits ranging from \$20 to \$100 per acre.



Smallholder Farmer Training. Another way we strive to make a real difference in the lives of farmers and farming communities is by offering training to smallholder farmers, both through sustainability partnerships and as part of our standard business practices.

SOME EXAMPLES OF MONSANTO SMALLHOLDER FARMER TRAINING IN FISCAL YEAR 2015

COUNTRY	TYPE OF TRAINING	NUMBER OF SMALLHOLDER FARMERS
Philippines	Farmers receive productivity training on overall best agronomic practices — from insect resistance management to choosing the best hybrid for their land.	40,000
Indonesia	Through a partnership with PISAgro, farmers receive training on good agriculture practices to improve productivity like irrigation, planting and harvesting. Farmers learn sustainable practices such as reduced tillage and composting to produce natural fertilizer.	185,000
Vietnam	Farmers received training on the overall best agronomic practices for productivity and sustainability through DEKALB® conventional field days and meetings. In addition, they were educated on DEKALB® corn with Genuity® stacked trait technology before the product's launch using online resources and field tours.	196,000
India	As part of Project SHARE 2, farmers learned to increase productivity in a sustainable way through demonstration plots, irrigation infrastructure and partnerships.	71,000
India	Centers of Excellence farm trials and Indian Cotton Farmer Network	27,799



Engaging on Health and Nutrition

Interest in food – from seed to supermarket to sauté pan – is growing. That's why we're working together and learning from external leaders involved in conversations about food and nutrition, including culinary specialists, dietitians, food and nutrition science academics, and their organizations and societies. We're openly sharing information and insights with these food community leaders. That is the impetus behind initiatives such as Monsanto's Leaders Engaged in Advancing Dialogue (L.E.A.D.) Network.



L.E.A.D.ING THE FOOD AND NUTRITION DIALOGUE: MEMBER INTERVIEW

Amy Myrdal Miller, MS, RDN, FAND, is a member of the Monsanto L.E.A.D. Network, a Registered Dietitian Nutritionist, a farmer's daughter and president of Farmer's Daughter® Consulting. She is a member of the Academy of Nutrition and Dietetics and holds a BS in dietetics and an MS in nutrition communication. As a L.E.A.D. Network member, Amy receives a yearly honorarium from Monsanto.

Tell us about your experience as a L.E.A.D. Network member.

L.E.A.D. has been incredibly rewarding. All members receive exposure to experts in science and technology who give us great insights into issues related to modern agriculture.

There's a lot of diverse expertise within the L.E.A.D. Network: media dietitians, retail experts, seasoned communicators, both from rural areas and big cities. We're committed to being a voice for farmers among consumers who want to eat a healthy diet, but have questions about food and agriculture.

What have you gotten out of your membership in the L.E.A.D. Network?

I enjoy the opportunity to develop closer relationships with other dietitians who deal with the same issues as I do – like GMOs, GMO labeling and concerns about pesticide use and residues. L.E.A.D. has allowed me to engage in conversations with stakeholders covering different topics – from honey bee health to vegetable seed breeding. More importantly, it's enabled me to talk about agriculture in a way that helps consumers better understand the use of science and technology in our food system.



What is the L.E.A.D. Network's impact on agriculture and society?

All of us in the L.E.A.D. Network are engaging in more critical conversations with people about our food, thanks to what we've learned. I don't see myself as a warrior or a fighter. Rather, I accept that people have different perspectives when it comes to food, and I'm proud to help people broaden their perspectives on complex issues.

Tell us about some of the events you attend as a member.

One of my favorites is the Monsanto Vegetable Seed Field Days Immersion event. Hosted at the Monsanto vegetables facility in Woodland, California, it features experts from the produce industry, a rapid-fire Q&A session with Monsanto executives, as well as field tours where we talk to passionate plant breeders and taste their produce. At the 2015 event, there was a diverse group including university researchers, leaders from organizations like United Fresh Produce Association, retail dietitians and their produce-buying partners.

Additionally, all 15 L.E.A.D. members are asked to host a "Dig-in Dialogue" event – an opportunity to bring together food and agriculture industry experts to discuss food issues in a safe environment.

L.E.A.D. has enabled me to talk about agriculture in a way that helps consumers better understand the use of science and technology in our food system.

Amy Myrdal Miller, MS, RDN, FAND President, Farmer's Daughter® Consulting

How has your participation in L.E.A.D. impacted you?

As a farmer's daughter from North Dakota, I've been immersed in discussions about farming my entire life. But, my participation in the L.E.A.D. Network has allowed me to build my foundational knowledge and develop expertise that I can share more broadly.

Today, I'm proud to be part of a family that relies on modern agriculture. My brothers grow crops from GMO seeds on 10,000 acres, and I see firsthand how GMO crops are a wonderful option – they increase productivity and reduce reliance on pesticides and other crop inputs.



REACHING OUT TO COMMUNITIES

Having a positive impact in the communities where we work and live and on society at large are key priorities at Monsanto. Our support of education and community health and safety are investments in our collective futures.



As technology increasingly becomes part of people's daily lives, it's more important than ever for individuals to be equipped with science and math skills. We aim to partner and create tools for students that will encourage them to be curious, think critically and ask questions in an effort to make evidence-based decisions. We collaborate with partners to prepare the next generation of leaders by encouraging students to learn more about and pursue careers in science, technology, engineering and math (STEM) in the food and agricultural industries. Simply put, to meet the changing needs of our planet, STEM skills are essential.

Aligning with United Nations Sustainable Development Goal No. 4 – Ensure inclusive and equitable quality education and promote



lifelong learning opportunities for all - Monsanto focuses on education in under-represented urban communities and rural communities where our customers raise their children, both of which are often under-represented and underserved in STEM disciplines. Every person relies on agriculture, and without a STEM-educated workforce. we will be challenged to sustain our planet and feed our families. Some of the initiatives in which we're currently involved include:

Feed, Nourish, Thrive Campaign. Developed by the STEM Food and Ag Council, a project of STEMconnector®, of which Monsanto is a member, the <u>campaign</u> aims to increase the number of people working to feed the planet's growing population through STEM careers. The campaign's online platform connects users to STEM education resources and career opportunities.

University Outreach. We reach students by participating in science conversations at universities and partnering with student groups. Monsanto and the Net Impact® student organization co-founded #Nourishing 9B Solution Labs, which is designed to help students work side by side with food system experts and engage on critical issues and develop solutions that could change the world. Experts include academics, industry leaders, government agencies and NGO representatives.

America's Farmers. Sponsored by the Monsanto Fund, the following America's Farmers programs work to make a positive impact in rural America through the support of communities, schools and youth. The programs have awarded more than \$29 million across the United States since 2010.







SCHOLARSHIPS AWARDED \$528,000

TOP 5 FIELDS OF STUDY











- America's Farmers Grow Rural Education encourages eligible farmers to nominate their local public school districts to apply for \$10,000 and \$25,000 grants to enhance math and science education. In 2015, the Monsanto Fund awarded \$2.3 million to 164 rural public school districts.
- America's Farmers Grow Ag Leaders, a 2014 pilot project that was launched nationwide in 2015, is a scholarship program that provides students an opportunity to earn \$1,500 scholarships to help fund their education in an ag-related field. In 2015, the Monsanto Fund awarded \$528,000 to 352 deserving students.

America's Farmers Grow Communities. while not strictly an educational initiative, provides an opportunity for eligible farmers to win a \$2.500 donation directed to a rural nonprofit of their choice. In 2015, the Monsanto Fund awarded more than \$3.3 million to 1.323 counties across 40 states.

Monsanto Beachell-Borlaug International Scholars Program (MBBISP). This global program has helped more than 80 scholars pursue careers in plant breeding and related science fields focused on improving wheat and rice crops - the world's largest food crops. This is an example of STEM investment in action, empowering the next generation to make a real difference in ensuring access

to balanced meals. Thirty scholars have already finished the program and nearly half of those graduates are now working in the public sector. Visit our website to learn more about MBBISP.

Monsanto also continues to work with organizations like the National FFA Organization and 4H.

Collectively, these efforts to promote STEM education are critically important. A guarter of current food and agriculture professionals are age 55 or older, meaning that workforce attrition will create additional opportunities for young professionals to advance in their careers. This could include more than 1 million jobs in the agriculture and food industries over the next 10 years.



Taking a Global Approach to Community Health and Safety

The health of the people in the communities where we operate is a high priority; they are our employees, their families and our neighbors. We invest in community health and safety initiatives on a global scale. From organizing disease prevention seminars to distributing first-aid kits, our sites implement vital programs to tackle pressing issues impacting the well-being of our communities.

Community Health

India. Venomous snake bites are one of the most significant hazards on the farms and in the villages of rural India. Several years ago, Monsanto began providing anti-venom kits and training to our field teams, so they have the resources to properly respond in the event of a snake bite incident. This program has helped save at least 80 lives. Over the last five years, the Monsanto India Human Rights team has taken a systematic approach to its anti-venom program - identifying locations prone to snake bites and proactively supplying local doctors with anti-venom kits, developing a tracking mechanism to ensure that kits are quickly replenished,

and providing essential information to growers and community members to ensure victims can get help quickly to minimize the impact of snake bites.

Latin America North, PREVENIMSS is a governmental program oriented to improve the health of the community. The program engages companies to provide education and prevent disease through health fairs and other activities. Monsanto Latin America North has implemented PREVENIMSS health fairs at a majority of our sites in the region, where we invite medical service providers to promote health topics to our employees and in the community.

Ukraine. Through our Grain Basket of the Future grant program, we provided funding to Open Hearts NGO for the construction of a training center for people with disabilities, which opened in June 2015. The facility is equipped with an obstacle course and state-ofthe-art exercise machines designed to help people with disabilities overcome everyday barriers. The center will also host workshops where disabled children and children from the community can do arts and crafts projects together.



Community Safety

Monsanto's focus on safety extends beyond the job site. Our Off-the-Job Safety (OTJS) efforts reached over 1.3 million people globally in fiscal year 2015 – a 27 percent increase from 2014. This includes OTJS site and community outreach events impacting employees, families, communities and customers.

Our multiyear global Home Emergency Preparedness Initiative, for example, provides employees with safety resources and training on how to use them. These resources can have a profound impact.



In 2015, Monsanto employee Marissa and her husband used the fire extinguisher and safety training they received from Monsanto to contain an electrical fire in their home.

Because of the training and recourses I was provided through Monsanto's Safety program, we were able to control the fire until the fire department arrived. We had minimal damage and were able to keep our family safe and save our house.

Marissa Administrative Assistant

Other impactful examples of our OTJS initiatives include:



India. We successfully engaged more than 200,000 growers, school children and community

members in our OTJS activities, which covered farm safety, sustainability, emergency preparedness, health and sanitation.



Indonesia. To promote safety awareness in the field and on the road, our Indonesian DEKALB®

growers were invited to take part in a series of education seminars focused on road hazard recognition, safe driving and safe use of pesticides. The initiative reached more than 1,500 growers.



Turkey. We partnered with the Ministry of Education to provide in-school safety training to children ages

8 to 11. A variety of presentations, videos, booklets and cartoons were used to teach kids safety rules - from safe play and biking to proper waste management and water safety.



We also built on our popular Growing Safely video series focused on safety in agriculture, addressing

six new topics: child safety on the farm, farm electrical, grain auger, power take off, farm emergency preparedness and tree stand safety. The Growing Safely videos are hosted on our Off-the-Job Safety YouTube channel and America's Farmers website for employees and external audiences to share. They've collectively received more than 300,000 views.

Volunteering for the Greater Good: Monsanto Together

In 2010, we launched the Monsanto Together Volunteer Program in the Americas, which not only encourages our employees to volunteer for causes that matter to them, but also rewards them for their time and effort through service grants that support the organizations they support. In 2015, we expanded the program globally to all of our regular full-time employees, accompanied by a newly designed website available in five languages, as well as a simplified service grant-vetting process for international nonprofits.

Service grants range from \$250 for individual volunteer efforts and up to \$5.000 for team-based volunteer events. For every 20 hours of service an employee volunteers at an eligible nonprofit, he or she can earn \$250 for that organization.

In calendar year 2015, more than 5,000 employees volunteered more than 105,000 hours across many countries. Since its launch, the Monsanto Together Volunteer Program has recorded more than 380,000 volunteer hours.



IMPROVING LIVES FOR OUR PEOPLE

To ensure the success of our employees, we invest in world-class training and development, foster diversity and work to provide a healthy and safe work environment.

Developing Our Employees

Development, Performance and Rewards (DPR). Under the 70/20/10 principle, the most impactful development and growth (70 percent) occurs in the context of an individual's performance in their current job while 20 percent impact is achieved through coaching and 10 percent impact is achieved through formal training. Monsanto is uniquely positioned to maximize the 70/20/10 principle through its DPR process. Much of the development that needs to occur is built into the context of an individual's daily work with support and coaching from their manager. The DPR process integrates an individual's performance on the job and professional development with financial rewards. A significant portion of employee development occurs on the job, with support and coaching from the manager. Additionally, Monsanto provides excellent training opportunities.



Monsanto's Leadership Exchange Program. Monsanto has built a program that empowers selected employees to accelerate their professional development and helps the company identify and nurture strong leadership candidates at three key career milestones:

- Global Leadership Exchange Created for leaders who manage other leaders and have demonstrated high levels of potential and performance. This six-month program gives participants an opportunity to engage in dialogue with executive team members about Monsanto's global businesses, expand their skills in business planning processes and strategy, and enhance their capabilities as senior leaders. In 2015, 40 employees participated.
- Regional Leadership Exchange -Developed for leaders of projects or teams who already hold a formal leadership role and have demonstrated high levels of potential and performance. This sixmonth program empowers participants to discuss challenges and opportunities facing Monsanto's businesses within their region, expand their business acumen and improve their ability to influence and lead effectively. In 2015, 152 employees participated.
- Local Leadership Exchange Designed for future leaders who are typically early in their career but have already shown high potential. This nine-month program gives participants a deeper understanding of Monsanto's businesses and leadership expectations and helps to hone their



critical and strategic thinking skills. In 2015, 114 employees participated.

People Leader Learning Series (PLLS). As part of our efforts to help employees bring out the best in each other, we created the PLLS – a classroom training program that focuses on enabling and further developing leadership skills critical for managers. In 2015, 347 people completed a PLLS workshop.

Business Forum Functional Training. Monsanto has partnered with the Olin Business School at Washington University in St. Louis to deliver a series of hands-on classroom training sessions to prepare employees for the next step in their careers. Designed to cover both fundamental management theories and practical business case studies, the training offers two tracks focused on strategy and finance.

Empowering Employees with Learning Opportunities. To support the growing needs of our diverse workforce, we've invested in a number of specialized learning resources that allow our employees to take ownership of their professional development.

Monsanto's Apprenticeship Program -Designed primarily to promote skilled labor opportunities for women in the region around our Soda Springs, Idaho, AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE REVIEWS

PERCENTAGE OF ELIGIBLE EMPLOYEES RECEIVING CAREER DEVELOPMENT REVIEWS

TOTAL	10	8
Male	95	84
Female	93	100
TOTAL	94	91
Male	93	88
Female	86	90
TOTAL	91	89

NON-MANAGERIAL

MANAGERIAL

- location, this 55-week paid program gives apprentices specialized mechanical and on-the-job training in preparation for a full-time position at Monsanto upon successful completion of the program.
- English for Leaders Program Monsanto offers the opportunity for employees - for whom English is not their native language – to improve their English skills to help them in their current leadership role and develop for future opportunities.
- Synapse An online collaboration tool that connects employees at different sites in Asia Pacific, Brazil, China and North America, this digital networking system provides opportunities to seek input, share best practices or solve problems together.
- **Skillsoft** This online content portal hosts a variety of courses, e-books, videos and more, giving global employees the power to access professional development content when it is convenient for them and through their preferred device.



Tuition Assistance – Eligible employees can receive reimbursement for tuition expenses as established by their region. In the United States, for example, Monsanto will reimburse up to \$7,500 per calendar year for eligible full-time employees or \$3,750 per calendar year for eligible part-time employees.

Embracing the Power of **Inclusion and Diversity**

Honoring and embracing inclusion and diversity drives broad employee engagement, innovation and business success. We view diversity as the collective makeup of a variety of attributes, backgrounds, cultures, identities and ideas that people bring with them – to the workplace and everywhere else. These may be informed by but are not limited to race, color, religion, gender, age, national origin, disability, veteran status, gender identity, gender expression, sexual orientation or any other characteristic protected by applicable law. Our efforts foster an environment of openness and inclusion.

Our mission to create an inclusive culture starts at the top. Our Management Advisory Committee (MAC) Inclusion & Diversity Council (MIDC) is a cross-functional subset of our top leaders from around the globe. These 22

individuals are charged with providing strategic direction around inclusion and diversity in a way that promotes innovation, builds trust and maintains our competitive advantage.

Sponsoring Diversity. To accelerate leadership opportunities at Monsanto, in 2015 we piloted a yearlong sponsorship initiative, pairing 22 high-potential "protégés" with an individual member of the MIDC. Protégés met with their assigned sponsors once a month for advanced mentoring while also participating in accelerated professional development sessions.

Participants reported feeling more engaged, more visible and better positioned for future roles within the organization. Six were placed on special project teams, four had their roles expanded, two obtained new leadership roles, one was placed on an external board of directors and one traveled internationally for greater exposure to senior leaders.

The MIDC has plans to expand this sponsorship initiative, connecting approximately 100 high-potential diverse leaders to MAC sponsors from around the world.

Tackling Unconscious Bias. As part of our efforts to foster an inclusive and collaborative organization, we've focused on raising awareness of unconscious biases and

END OF CAREER SUPPORT

As part of our efforts to maintain sustainable growth, we announced plans in 2015 and early 2016 to restructure our global operations, including an expected separation of approximately 3,600 employees over an 18 to 24 month period. For those in need of career transition assistance, we provide a number of regional programs and resources to facilitate continued employability. In the United States, for example, separated employees receive:

- Enhanced severance payment
- Extended benefits
- Unlimited access to a personal transition coach for six months
- · Personalized resume and cover letter writing assistance

- Individualized job leads
- Access to trainings and seminars that help transitioning employees leverage their network, skillset and professional background

creating strategies for counteracting their effects in the workplace. Unconscious bias is defined as attitudes that affect our understanding, actions and decisions of which we are unaware.

In 2015, we launched an unconscious bias training program, a series of faceto-face and virtual workshops designed to help leaders and employees identify their own unconscious biases and offset associated negative effects. Through



this initiative, we've trained more than 1,000 leaders and employees, including our regional leadership teams in Africa, Asia, Brazil, Canada and the United States.

Plans are underway to expand the training program globally. We expect to engage an additional 4,000 employees worldwide.

I FEEL VALUED WHEN I AM INCLUDED. I THOUGHT I WAS INCLUSIVE JUST BECAUSE I FELT THAT WAY, COMING FROM DIVERSE BACKGROUND. I WAS WRONG. I HAVE BECOME FAR MORE CONSCIOUS OF MY ACTIONS AND ATTITUDES AND HOW THEY INFLUENCE THE INCLUSION OR EXCLUSION OF OTHERS IN THE COMPANY AFTER 1 TOOK THE UNCONSCIDUS BIAS TRAINING.

Juan Ferreria

Crop Protection and Seed Applied Solutions Lead

Business Resource Networks. A key example of our culture of inclusion is the Business Resource Networks (BRNs) we support. These employee-led groups enhance and diversify our company through memberfocused initiatives including careers, growth and progression and connecting with customers and communities. Approximately 15 percent of our global employee base is a member of one of these employeeled groups. In 2015, our BRNs included:

- Access Supports employees, their family members and our customers with visible and non-obvious disabilities.
- African-Americans in Monsanto
- **Encompass** Provides an environment of support, learning, sharing and communication for Monsanto's lesbian, gay, bisexual and transgender employees.
- The Family Network Provides important resources for employees and their families and helps them balance their work contributions with family responsibilities.
- Monsanto Asian Connection
- Monsanto Latin Network
- VanGuard Focuses on bringing together Monsanto employees who supported their country or state through military service.



MONSANTO SIGNS HRC EQUALITY PLEDGE

In 2015, Monsanto signed the "Equality is Our Business" pledge launched by the Human Rights Campaign to combat anti-lesbian, gay, bisexual and transgender legislation. The pledge reinforces Monsanto's support for inclusion and diversity for all.

- St. Louis Women's Network
- Young Professionals Network
- lamMonsanto (lam) Networks Where no critical mass of a particular demographic exists, these business resource networks leverage site-based representatives who channel the impact of each of the above networks into one group.

Rewarding Great Work

Monsanto provides employees with a comprehensive Total Rewards package including compensation, retirement benefits, health care benefits and much more. Compensation plans are aligned with local markets and are competitive and equitable. They include a common short-term incentive plan for all non-sales direct employees; direct management employees receive annual longterm incentive grants. Monsanto's benefits are



designed to attract and retain the best employees. In the United States, we provide a suite of benefits to regular full-time and part-time Monsanto employees who work 20 hours per week or more. Individuals that are employed directly by Monsanto on a temporary basis may become eligible for medical plan benefits and paid holidays based upon the length of their employment and retirement benefits based on number of hours worked.

In other countries in which Monsanto operates, employee classification, benefit plans and Great Place to Work Policies differ by country and location due to hiring practices, statutory requirements, market practice and cultural norms.

TYPICAL TOTAL REWARDS COMPONENTS PROVIDED BY MONSANTO

	U.S. DIRECT REGULAR FULL-TIME AND PART-TIME EMPLOYEES (working 20 or more hours/week)	U.S. DIRECT MONSANTO TEMPORARY EMPLOYEES	DIRECT (NON-TEMPORARY) INTERNATIONAL EMPLOYEES
Total Rewards Component			
Short-Term Incentive Plans			•
Long-Term Incentive Plans (Management Only)			•
Life/Accidental Death and Dismemberment Benefits	•		•
Dental Benefits			•
Disability (Short-Term and Long-Term) Benefits	•		•
Medical Benefits			•
Retirement Plan (Defined Contribution or Defined Benefit)	•		•
Great Place to Work Policies			
Adoption Assistance	•		•
Flexible Work Arrangements	•		•
Holidays	•		•
Paid Leave (New Parent, Military, Bereavement, Others)	•		•
Service Awards	•		•
Tuition Reimbursement Assistance	•		•
Vacation			•



Employee Composition Data Fiscal Year 2015

Total Workforce.

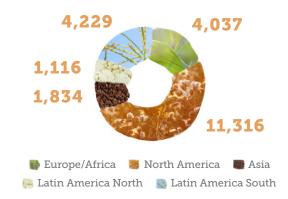


Note: We do not centrally track contract workers. Our Environmental, Safety & Health Group applies an algorithm to the total number of hours worked by contract workers to derive a Full Time Employee equivalent for OSHA reporting purposes in the United States.

Total Number of Employees Broken Down by Employment Type.



Total Workforce by Region.



New Hires by Gender.



New Hires by Age Group.



New Hires by Region.





Employee Composition Data Fiscal Year 2015

Percentage of Employees by Gender.

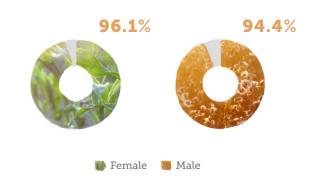


Percentage of Employees in Minority Groups.*



*United States only. Excludes Caucasian males and Caucasian females

Return to Work and Retention Rate After Parental Leave by Gender (United States).



Number of Employees Leaving Employment by Gender.

Overall Rate: Percentage of Total Workforce



Number of Employees Leaving Employment by Age Group.



Number of Employees Leaving Employment by Region.





Promoting Employee Health, Safety and Well-Being

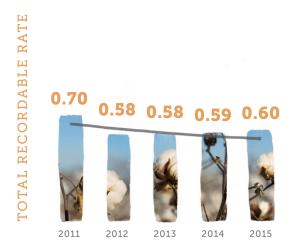
Our employees are our greatest assets, and we place their health and safety above everything else. To this end, we've invested in a number of world-class health, safety and wellness initiatives.

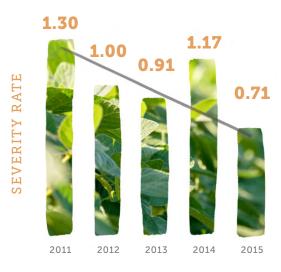
Each of our facilities has had effective, sitespecific health and safety systems in place for years. Approximately 95 percent of our workforce is represented on environment, safety and health (ESH) committees. As we evolve, we recognize the opportunity to create more efficiency and consistency in our occupational health and safety programs. In 2015, we began laying the groundwork for a new ESH management system to better control risks, ensure compliance and leverage resources across our global operations. The new system will be aligned with best practices established by groups such as the International Organization for Standardization (ISO).

Evaluating Injury Severity. Even with the best safeguards, systems and training in place, on-the-job injuries sometimes still happen. We take every type of injury seriously and create meaningful injury prevention programs. In recent years, we've started

SEVERE INJURY RATE DOWN 39 PERCENT

A common measure of occupational health and safety is the Total Recordable Rate (TRR). But TRR is not an indication of severity. Since 2011, we have assessed the severity of recordable injuries and illnesses. As the graphs below indicate, our overall TRR has remained stable over the last several years but the severity rate has decreased by 45 percent since 2011, including a 39 percent drop in 2015. Because severity rate is a highly sensitive indicator, one isolated severe injury and a few low-severity injuries and illnesses accounted for the increase in 2014.





tracking the severity of all work-related injuries to evaluate where we could have the most positive impact. These metrics allow us to focus our efforts on addressing the activities that can lead to the most severe injuries.

One area of our business where we saw an opportunity to make a real difference was field safety. We implemented several new solutions in 2015 to prevent injuries associated with the operation of field equipment. In Argentina, for



example, we equipped all of our detasseling machines with seat switches that automatically turn off the machine once a worker rises from the seat. This feature safeguards operators from injuries that might otherwise occur if the machinery is left running while they tend to other tasks. Plans are already underway to implement this and other technologies globally to improve field safety.

We're already seeing impressive results from our field safety initiative. In 2015, we realized a 39 percent reduction in our severity rate, achieving our lowest severity rate score since we began tracking this data in 2011.



MONSANTO STAR PROGRAM

We recognize health and safety performance at our sites with the Monsanto Star designation. To be considered for a Monsanto Star rating, the location must undergo a rigorous third-party audit of its health and safety programs, meet all of Monsanto's health and safety criteria and have an accident rate that is less than half of the industry average. In fiscal year 2015, we awarded our Monsanto Star designation to 11 new sites, bringing the total of Monsanto Star locations worldwide to 144.

Putting Safety First. All of our sites are governed under our ESH policies, which encourage the active involvement and representation of employees through ESH councils or committees. Where we have formal occupational health and safety councils, our employees are represented and participate in creative problem solving to further reduce the risk of injuries on the job. These employee-led councils increase engagement and ownership in the safety process. In addition, we have programs and policies in place to provide recognition for outstanding safety performance.

Preventing Occupational Diseases. In certain areas of our business, employees can encounter hazards, such as noise, dust and certain classes of chemicals, which could potentially impact their health. Our health and safety protocols ensure that employees are equipped with the proper protective gear.

In 2015, we continued our efforts of engineering controls and job rotations, along with the elimination of potentially hazardous chemicals where feasible, to create working environments that reduce



STEPATHION

In 2015, Monsanto India launched Stepathlon, a 12-month program that encouraged employees to walk at least 10,000 steps per day. Our employees really "stepped up" to the challenge. Ninety-four percent of eligible employees registered for the Stepathlon and together surpassed the program's goal, achieving an average of 11,318 steps per person per day.

exposures to levels that are safe for employees without donning protective gear. Our sites provide regular medical hazards screenings to ensure that employees are adequately protected. In 2015, our efforts to reduce exposure to workplace hazards allowed us to remove 300 workers from the medical screening programs.

Supporting Well-Being in the Workplace. In 2015, we conducted a global assessment to determine the reach of our employee well-being programs. The assessment revealed that while focus areas vary from region to region, well-being initiatives reached virtually all of our sites. In 2016, we will focus on furthering strategic alignment of our well-being programming.



Tracking Health and Safety Performance

Health and safety data are included for both employees and contract workers by region in the charts that follow. For injury data, minor injuries that require only on-site first-aid treatment are not included in the reported rates.

The "Lost Days Rate" is based on calendar days and begins one day after the injury or illness occurred. Injury Rate (IR), Occupational Disease Rate (ODR), Lost Days Rate (LDR) and Total Recordable Rate (TRR) are calculated using the following formula and are based on U.S. Occupational Safety and Health Administration (OSHA) guidance:

IR = Total Number of Injuries / Total Hours Worked x 200,000

ODR = Total Number of Occupational Disease Cases / Total Hours Worked x 200,000

LDR = Total Number of Lost Days / Total Hours Worked x 200,000

TRR = (Total Number of Injuries + Occupational Diseases) / Total Hours Worked x 200,000

The factor 200,000 is derived from 50 working weeks at 40 hours per 100 employees. By using this factor, the resulting rates are related to the number of workers, rather than the number of hours.

OCC = Occupational

HEALTH AND SAFETY DATA

	SUPERVISED CONTRACTORS* INJURY AND		BY MONSANTO EMPLOYEES INJURY AND	
By Region	OCC DISEASES Total Recordable Rate (TRR)	DAYS AWAY Lost Days Rate (LDR)	OCC DISEASES Total Recordable Rate (TRR)	DAYS AWAY Lost Days Rate (LDR)
Asia Pacific (China & Taiwan, India, Asia Pacific)	0.49	2.00	0.00	0.00
EMEA (Europe, Middle East, Africa)	1.06	9.38	0.24	1.94
Latin America North	0.75	4.02	0.00	0.00
Latin America South	0.55	6.74	0.10	0.74
North America (Canada, Puerto Rico, United States)	1.31	5.51	0.51	9.54
By Gender**				
Female	1.05	6.06	0.06	0.03
Male	0.97	5.92	0.22	3.81
	INJURY	OCC DISEASES	INJURY AND OCC DISEASES	DAYS AWAY
Totals	Injury Rate (IR)	OCC Disease Rate (ODR)	Total Recordable Rate (TRR)	Lost Days Rate (LDR)

EMPLOYEES AND

Employees and Supervised Contractors* (2015)

Contractors Not Supervised by

Monsanto Employees (2015)

2015

2014

0.89

0.14

0.54

0.50

0.10

0.01

0.06

0.08

1.00

0.15

0.60

0.59

CONTRACTORS NOT SUPERVISED

5.97

2.13

4.31

6.76

^{*} Contract workers supervised by Monsanto employees

^{**} U.S. gender information for non-employees (contractors) is not reported to ensure compliance with data and labor regulations.



FORGING THE WAY IN HUMAN RIGHTS

Respecting and protecting the dignity of every person is a long-held commitment of Monsanto. To this end, we have policies and practices in place to ensure that the fundamental human rights of workers are upheld. In 2015, we strengthened our commitment with new programs and enhancements to improve working conditions and facilitate open communication with our workers.

Our Human Rights Policy

Our commitment to human rights is formalized in our Human Rights Policy. In some cases, our Policy is stronger than what is required by law or what is customary in a specific region of the world. Our Policy is informed by the United Nations' Universal Declaration of Human Rights and the International Labour Organization's Fundamental Principles and Rights at Work, both of which are widely recognized international standards.

In 2015, more than 1,900 new employees, representing 99 percent of new employees, completed computer-based training on Monsanto's Human Rights Policy. We also required all full-time employees in our research



and development business functions to complete a more in-depth computer-based training focused on four Policy elements where field laborers may be particularly vulnerable to issues such as working hours, compensation, discrimination, harassment and violence. Including the new hire training, this represents 2,392 hours of human rights training completed by Monsanto employees in 2015.

We employ security professionals around the world to safeguard our sites and our workers. All of our security employees and individual security contractors have been trained on our Human Rights Policy. In certain areas of the world where we contract with security companies, our Human Rights Champions (see Page 49) provide training to groups of employees from these companies. In total, these efforts reached more than 440 security officers worldwide in 2015.

Our Human Rights Policy supports the rights of workers to associate freely and bargain collectively. In situations where these rights are restricted under law, we facilitate an open line of communication with management so workers can freely voice concerns. In excess of 15 percent of Monsanto's regular employees are covered by a collective bargaining agreement. In 2015, we engaged in three separate negotiations with labor union leaders. Each of the matters was short in duration and successfully reached solutions acceptable to both Monsanto and the unions.

We view our seed supply and labor provider contracts as areas of significant investment where human rights have the potential to be impacted. In 2015 we had contracts with 30,732 such entities, and 100 percent of the contracts contained human rights clauses.



Tracking Our Progress

Working with our Business Partners. We strive to identify and do business with partners who share our commitment to human rights and ethical business practices. For the business partners with whom we contract directly, their contracts bind them to uphold the elements of our Human Rights Policy. We're also phasing in a purchasing system that asks all business partners to complete a questionnaire about their employment practices and policies.

In certain countries, a significant number of the partners with whom we work are contracted indirectly, but the party that contracts with those business partners is obligated to cascade the contract language to advance our standards and policy.

We also conduct periodic audits of our suppliers to ensure they are acting consistently with our Human Rights Policy. In 2015, we conducted more than 25,000 assessments of business partners globally. When violations of our Policy are identified, our first choice is to work with our business partner to improve their practices in compliance with our standards. Sometimes, however, business relationships need to be terminated. In 2015, we decided not to renew our contracts with one business partner in Zambia, two in Argentina and 112

in India as a result of inconsistencies with our stated policies, including child labor, potential forced labor and compensation (see Page 50 for information on how we're working to address human rights issues in India).

Ensuring our "House" is in Order. In our owned operations, we have several methods for assessing human rights impacts. Our Human Rights Champions assess the operations in the geographies they cover, with priority on the highest risk countries, and report and remedy any concerns.

The Environmental Safety and Health Corporate Audit team also conducts human rights assessments when they visit high- and medium-risk country sites on a rotating basis that may not have been recently assessed. The findings from these audits are tracked in our recently implemented management system to ensure more consistent reporting and implementation of corrective measures and actions across our global operations.

In 2015, we audited 84 labor providers at our U.S. corn manufacturing and breeding sites. Together, these operations accounted for more than 6,700 workers. This marked the second consecutive year of audits at our U.S. manufacturing sites, and resulted in improved scores from the previous year, despite more stringent requirements in the second year of the audit. The 2015 audits also



CHAMPIONING **HUMAN RIGHTS**

Monsanto has established a global network of Human Rights Champions to heighten awareness of human rights issues and resolve concerns swiftly in their respective regions. Our Champions play an integral role in efforts to provide a healthy and safe workplace as they engage with field workers, conduct audits, coordinate human rights initiatives and implement solutions to create better working conditions.

In 2015, our Human Rights Champions led the expansion of our mobile phone survey program, an initiative designed to solicit anonymous feedback from seasonal laborers about their working and living conditions. The insights from this program are making a positive impact.

When Monsanto introduced the mobile phone survey program to our vegetable business in 2014, it was a huge success.

The company took immediate action based on worker feedback, providing better information regarding how compensation is calculated and making enhancements to worker housing. This year, Monsanto expanded the mobile phone survey program to reach more than 2,500 additional workers in our row crops business. Once again, the company is implementing new improvements to living and working conditions. It's great to work for a company that listens to feedback and takes action.

Héctor Monsanto Latin America South Supply Chain Lead



identified several opportunities for improvement in both our manufacturing and breeding sites, and corrective actions are being instituted.

Where indigenous peoples live near or work in our facilities, we do our best to accommodate any special needs they have. We did not discover any significant issues involving the rights of indigenous peoples in fiscal year 2015.

Respecting Human Rights in High-Risk Areas

We conduct a global risk assessment of our field operations every three years. In our most recent assessment in 2014, we identified 10 countries with the greatest human rights risks and have concentrated our efforts on assessing and improving conditions in these areas.

In the Ukraine, for example, we hired a third party to audit our business partners operating within the country. Overall, the audit revealed most business partners followed our policy consistently. To address some minor areas cited for improvement, we will communicate more information. and supply personal protective equipment for contracted seed production growers to distribute to their workers in the region.

Helping Eradicate Child Labor

The use of child labor is a systemic problem throughout India. Our Child Care Program (CCP) Steering Committee oversees efforts to monitor our business partners' fields in India, remove any child laborers younger than the legal age limit of 14 and encourage parents to enroll these children in school.

One of the ways Monsanto minimizes instances of child labor in India is through our Model Village designation, a title awarded to communities with at least 50 farmers or 16 production hectares that have had no child labor observed by the CCP monitoring during the season. As an incentive and in recognition, Monsanto provides in-kind donations to schools in every Model Village. In 2015, 22 out of 31 eligible villages earned Model Village status.

Another way we work to eliminate child labor in India is through our Social Mobilizer program. Social Mobilizers are women trained in social work who we hire to follow up on reported instances of child labor and meet with farmers. families, women's groups, school officials and local leaders to promote the benefits of sending children to school rather than the fields.



CONVENING THE SEED INDUSTRY IN INDIA TO ADDRESS CHILD LABOR

In 2015, a study commissioned by the India Committee of the Netherlands (ICN) reported that some Indian and multinational seed companies were putting minimal to no effort into eliminating child labor in the fields of their growers. In response to this study, our CCP Steering Committee convened a group of nine seed companies and five NGOs to take a more coordinated approach to eliminating child labor. The consultation led to new proposals to guide the industry on these issues, and plans are underway to expand the dialogue with additional stakeholders.

In 2015, our child labor monitoring program recorded 0.18 percent child labor in our business partners' hybrid cotton seed fields in India. This amounted to 131 children in total. Our Social Mobilizers met with the families of these children and conducted follow-up visits at schools to record how many parents sent their children back to school. Eight of the families refused to enroll their children in school in 2015.

In our business partners' vegetable fields in India, four children were found working, and one in our business partners' corn fields. For both of these crop areas, this results in a child labor percentage of less than 0.01 percent, an order of magnitude lower than for cotton.



Balancing agricultural and societal demands with environmental resources through solutions that help farmers grow food more efficiently.

We only have one earth to provide for our needs today and tomorrow. So we're focused on pursuing agricultural solutions that can produce what's needed to feed a growing global population while preserving our natural environment. This starts with identifying solutions that help us use resources more efficiently within our own facilities and out in the fields. We're working to adapt to and mitigate climate change by improving our operations and collaborating with others. And we're continuing to protect freshwater sources, preserve biodiversity and improve soil health.

MITIGATING AND ADAPTING TO CLIMATE CHANGE

- Fighting Climate Change in Our Own Backyard
- Helping Others Adapt to and Mitigate Climate Change
- Collaborating on Climate Action
- Leading the Transition to a Low Carbon World
- Applying Data Science to Feed a Growing Population

ENSURING ACCESS TO FRESH WATER

- Using Water More Efficiently
- 59 Mapping Water Risks
- Better Understanding the Relationship of Irrigation on Modern Hybrids

BIODIVERSITY: PRESERVING SUSTAINABLE LANDSCAPES

- Making the Connection: Agriculture and Biodiversity
- Embracing Sustainable Landscapes
- Exploring the Benefits of Healthy Soil
- Digging into Soil Health 66
- 67 Heightening Honey Bee Health
- Supporting the Flight of the Monarch
- **Enabling Responsible Pest Control**
- Researching Natural Solutions for Plant Health and Pest Control

GUIDING AND AUDITING OUR ENVIRONMENTAL PERFORMANCE



MITIGATING AND ADAPTING TO CLIMATE CHANGE

Climate change is one of the biggest issues facing agriculture, as well as one of most pressing challenges facing humanity.

As a company entirely devoted to agriculture, we are particularly attuned to the potential effects of climate change including drought, severe weather, rising sea levels, shifting pest infestations, compromised harvests and flooding.

While great strides have already been made to reduce the intensity of agriculture's carbon footprint and help farmers adapt to a changing climate, agriculture still accounts for approximately 13 percent of global greenhouse gas emissions. To feed a growing population in a changing climate, we must work collectively to do even more. We are actively pursuing ways to mitigate and adapt to climate change while helping farmers do the same.

We employ and promote practices such as reduced tillage, cover crops and data-driven nutrient management that help keep greenhouse gases from entering the atmosphere, and many of our products including Genuity®



DroughtGard™ Hybrids help farmers both mitigate and adapt to climate change.

Fighting Climate Change in Our Own Backyard

In December 2015, we announced a commitment to make our footprint carbon neutral by 2021 through operational changes in combination with farmer programs and incentives. We will drive carbon neutral crop production in our seed operations with the goal of eliminating our seed production carbon footprint altogether. We are exploring incentive concepts for commercial farmers who adopt these methods in exchange for a portion of their carbon reduction value. which Monsanto would like to access to offset the remainder of our carbon footprint.



INVESTING IN OPERATIONAL GREENHOUSE GAS REDUCTIONS

Monsanto is investing approximately \$45 million to improve our crop protection facilities and make them more efficient both in the United States and South America. This enables us to both increase the amount of product produced and reduce energy consumption by 200,000 gigajoules per year, the equivalent of 11,000 metric tons of CO₂e, about the same amount emitted by burning nearly 26,000 barrels of oil. The latest part of the project was completed at our Sao Jose dos Campos plant in Brazil where \$6.6 million was spent to improve the heat recovery flows and processes in the plant to increase efficiency by 16 percent.







GREENHOUSE GAS **EMISSIONS INTENSITY** DOWN 16% IN FY 15 IN OUR CROP PROTECTION **OPERATIONS**

In May 2015, we committed to reduce greenhouse gas emissions in our crop protection operations by 22 percent (per pound of active ingredient) by 2020, relative to our baseline in 2010. This represents a cumulative greenhouse gas emissions reduction of 45 percent when compared to 2002. We targeted our crop protection operations sector because it is the largest contributor to our company's carbon footprint. We made significant progress in fiscal year 2015, reducing our emissions intensity 16 percent against the fiscal year 2010 baseline, putting us 73 percent of the way to our goal. Incentives to farmers will help offset the balance of our emissions that cannot be eliminated through operational advancements. Additionally, we've established an internal carbon price, which will be used to evaluate our capital investment decisions in order to drive down greenhouse gas emissions.

Helping Others Adapt to and Mitigate Climate Change

Monsanto develops highly productive crop varieties that enable farmers to produce more crops from existing farmland while reducing emissions per acre of land. We also provide weed control solutions that reduce the need for tillage, thus decreasing the number of times farmers need to plow

or cultivate and increasing the ability of the soil to store and maintain carbon. Data analytics and precision agriculture techniques enable farmers to more precisely apply fertilizer, use less fuel and water and maximize productivity from existing land.

Advancing Carbon Neutral Crop Production. In December 2015, we introduced the initial steps of a first-ofits-kind program for carbon neutral crop production to help reduce the carbon footprint of growing crops. This program includes education and incentives for farmers to adopt practices that allow corn and soybeans to be grown in a way that decreases greenhouse gas emissions and builds soil carbon in amounts equal to or greater than the total amount emitted to grow and harvest those crops. Widespread adoption of these practices, including the reduction of tillage and expansion of cover crops, could lead to improved soil health and increased carbon storage, resulting in carbon neutral crop production on millions of acres of farmland.

With the help of external experts, Monsanto has developed carbon neutral crop production models to share with broader agriculture and climate modeling communities in the hope that the crop production sector could have a positive impact on climate change.

These models to date are focused on the U.S. Corn Belt, where the most accurate data on crop yields, soil types, crop rotations and best management practices are publicly available. The models indicate that carbon neutral corn and soybean production, in the United States alone, has the potential to reduce crop production emissions equivalent to 100 million metric tons of CO₂e, which is equal to reducing oil consumption by 233 million barrels per year.

This program is a critical step in agriculture's overall effort to mitigate climate change. Agriculture offers a significant pathway to mitigating greenhouse gases. Organizations have started to invest in verified carbon offsets originating from agricultural activities. Agriculture can be a positive force in the fight against climate change, and it's important to see Monsanto Stepping forward in this way.

Dr. Chuck Rice Distinguished Professor, Kansas State University and an author of the Intergovernmental Panel on Climate Change (IPCC) report



CARBON NEUTRAL CROP PRODUCTION

	EF	

DESCRIPTION



Uses energy, fertilizer and other inputs more efficiently

Data-Enabled Precision Agriculture

Using data science and information technology to make better informed decisions about applying inputs like fertilizer, pesticides and irrigation water.



Absorbs more carbon

Highly Productive Crops

Crops that produce more grain and plant material while absorbing more carbon per acre of land.

Crops grown to provide cover to farmland and prevent soil erosion while absorbing carbon between primary crop seasons.



Enables carbon neutral practices and improves harvests

Biotech Plants

Enables carbon neutral crop production by allowing weeds to be more easily controlled while reducing tillage.

Improved Plant Breeding

Rapid development of advanced plant varieties, which enable better harvests and more plant productivity.

This absorbs and stores more carbon per acre, while providing pest and drought tolerance.



Returns carbon to soil

Crop Residue

Parts of the plant that are left on the field after harvest to return carbon to the soil while enhancing soil quality.



Helps keep carbon stored in soil; fights erosion

Cover Crops

Crops grown to provide cover to farmland and prevent soil erosion while absorbing carbon between primary crop seasons.

Reduced Tillage

Tilling disturbs the soil and releases carbon in the soil to the atmosphere. Minimal or no tillage helps protect soil structure and keeps carbon in the soil.



Enhancing Nutrient Efficiency.

In partnership with Walmart, we're engaging farmers, consumers, supply chain partners and NGOs to find ways to manage nutrient applications more efficiently and curb greenhouse gas emissions on 1 million acres of U.S. crop land by 2020. As part of this initiative, we collaborated with GROWMARK to focus on working with individual farmers to develop customized nutrient action plans by using data science, in-field sensors and other tools. Currently, 200,000 acres of farmland have been enrolled in year one of the initiative, which promotes efficient and innovative use of fertilizer. GROWMARK is a regional agricultural supply cooperative serving farmers in more than 40 U.S. states and Ontario, Canada.

As an outgrowth of our commitment with Walmart, Monsanto has joined the Midwest Row Crop Collaborative, a group of NGOs and companies in the food value chain that have made a CFO level commitment to collaborate with more row crop farmers in Illinois, Iowa and Nebraska on sustainable agriculture practices.



PLEDGING ACTION

In November 2015, Monsanto signed the White House American Business Act on Climate Pledge, which affirmed our commitment to climate action and our support for a strong outcome from the United Nations Framework Convention on Climate Change Conference in Paris (COP21) that took place in December 2015.

Collaborating on Climate Action

Monsanto is collaborating with a broad range of stakeholders to advance best practices, help farmers adapt to climate change and reduce the carbon footprint of agriculture. Here's an overview of a few of our partnerships:

- The Climate Smart Agriculture Low Carbon Technology Partnerships Initiative (LCTPi), co-chaired by Monsanto, is a collaboration led by the World Business Council on Sustainable Development (WBCSD) working toward a low carbon future. (See related article by WBCSD President & CEO Peter Bakker on Page 56)
- The Soil Health Partnership is a joint effort of National Corn Growers Association (NCGA), The Walton Family Foundation and Monsanto to work with growers to establish more than 100 test sites to demonstrate the highest-impact cropping rotations and systems to aid in crop-based greenhouse gas emissions reductions. (See related story on Page 66)
- Conservation International is working with Monsanto to develop the "Sustainable Agriculture Landscape" Program in Brazil and Indonesia, while helping farmers grow more food on the same amount of land. (See related article by Conservation International Indonesia Project Manager Fitri Hasibuan on Page 64)

- The Water Efficient Maize for Africa project is a multi-stakeholder partnership that aims to improve food security and livelihoods among smallholder farmers in Sub-Saharan Africa by developing hybrid maize (corn) seed that uses water more efficiently and resists insect pests. (See related story on Page 27)
- The <u>USDA Resilient Economic Agricultural</u> Practices (REAP) initiative in conjunction with the Agriculture Technology Innovation Partnership Foundation (ATiP) is a multi-stakeholder partnership supported in part by Monsanto with a goal of advancing resilience and economic viability of healthy soils for land uses.
- One of our collaborations with the University of Chicago is focused on quantifying the possible impacts of climate change on seven different row crops.
- Collaborations with ICF International and AgSolver, Inc. aim to quantify the potential greenhouse gas emissions reductions possible from various agricultural strategies.
- Brazilian Coalition on Climate, Forests and Agriculture is a collaboration through the Brazilian Business Council for Sustainable Development (CEBDS), in partnership with the Brazilian Coalition on Climate, Forests and Agriculture to drive action and scale for the deployment of technologies in sustainable land and forest management.





LEADING THE TRANSITION TO A LOW CARBON WORLD

By Peter Bakker, President & CEO, World Business Council for Sustainable Development (WBCSD)

On December 12, 2015, leaders and representatives from nearly 200 countries convened in Paris to sign an unprecedented agreement to combat climate change. This is a crucial moment in history that will define the pace of our inevitable transition to a low carbon economy. We need to massively transform our economies and societies worldwide to stay under the 2°C temperature-rise threshold and achieve net zero emissions in the second half of the century.

The faster the transition, the greater the opportunity. Bold climate action is the only way to ensure sustainable profits, employment and prosperity for all. Forward-looking companies know this, and they are taking ambitious measures across their value chains for significant emissions reductions. Yet no company, or government, can tackle climate change alone.

We need leadership, action and unprecedented collaboration among all stakeholders – businesses, governments and society - to accelerate the transition to a low carbon economy. The WBCSD-

led Low Carbon Technology Partnerships Initiative (LCTPi) incorporates these three components. Bringing together over 140 companies and 50 partners, LCTPi analyzes barriers and identifies solutions, financial requirements, policies and public-private partnership opportunities to scale up low carbon technology solutions.

Climate Smart Agriculture (CSA) is one of the nine focus areas identified by the LCTPi as being critical to the 2°C pathway. It aims to provide food security for the world's growing population while addressing the climate challenge. As a long-standing WBCSD member and one of the co-chairs of the LCTPi's CSA working group, Monsanto's sustainable agriculture expertise, thought leadership and farmer relationships have been instrumental in shaping the vision and road put forward at COP21.

In short, CSA aims to make 50 percent more food available and strengthen the climate resilience of farming communities while reducing agricultural and land-use change emissions from commercial agriculture by at least 50 percent by 2030 and 65 percent by 2050.

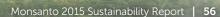
Getting there will not be easy. But through the efforts of global companies such as Monsanto and their CSA counterparts, these goals are achievable thanks to established collaborative

practices with farmers and other key stakeholders around the world. All farming scales and systems have a key role to play, from the family farms that account for 97 percent of the world's agricultural holdings supporting 2 billion people, to the commercial agriculture value chain that accounts for more than 30 percent of global food production.

I am encouraged to see the remarkable progress that Monsanto has made since they first joined the WBCSD following a conversation with their CEO Hugh Grant. Monsanto's contribution to the promotion of carbon neutral crop production models is an inspiring example for other businesses. The company's leadership in the value chain will be essential in the sustainability journey and a prerequisite for success of agriculture in the emerging low carbon world. As we now act upon the outcomes of COP21, business is leading the transition to the new economy through innovative solutions to support governments around the world.

Monsanto's sustainable agriculture expertise, thought leadership and farmer relationships have been instrumental in shaping the vision and road put forward at COP21.







Applying Data Science to Feed a Growing Population

The Climate Corporation, a division of Monsanto, offers farmers an integrated solutions platform that leverages data science and digital tools to aid farmers throughout the growing season with an eye toward enhanced productivity, efficiency and sustainability.

One of the most costly inputs and important activities that farmers do every year is manage nitrogen fertilizer applications. Nitrogen helps farmers achieve better harvests by adding a necessary nutrient to the soil. But the chemistry of nitrogen provides several challenges that farmers

must also address. Nitrogen fertilizers emit nitrous oxide, a potent greenhouse gas that can contribute to climate change. Additionally, nitrogen can sometimes be lost to waterways if applied just before a heavy rain.

The Climate Corporation offers the Nitrogen Advisor digital tool, which helps farmers optimize the amount of nitrogen they use on their fields. This tool was recently enhanced to allow farmers to input information about different fertility management practices that they've used, which enables the tool to provide better predictions and recommendations.

Through a combination of these farm-specific inputs and detailed data modeling, the tool informs farmers in real time how much nitrogen to apply to certain areas of their fields. Additionally, the tool analyzes fields after the crop is harvested to identify areas where there is a surplus or deficit of nitrogen.

Other tools from The Climate Corporation enable farmers to identify zones within their fields that may require different management practices, carefully select the best seed for each field zone and plant the optimal density in

each zone. Plus, through the collection of their own performance data, farmers are able to compare results of different seed systems and planting practices to determine the best fit for their land.

It's pretty dramatic when you look at one of our Nitrogen Advisor maps because you night see where you could take nitrogen that was over-applied on one field and move it to fields predicted to show a deficit. While you might apply the same amount of nitrogen, you can optimize it's use and substantially reduce the environmental impact because there won't be surplus nitrogen to run off. move into groundwater or release into the atmosphere.

Sam Eathington The Climate Corporation Technology Lead



ENSURING ACCESS TO FRESH WATER

Water is a critical resource for all life.

But, in many areas of the world, fresh water is becoming increasingly scarce due to increasing demand and the impacts of climate change. Because nearly 70 percent of all fresh water used by humans is used in agriculture, we've made a commitment to help farmers grow enough food while using water more efficiently. As the world's population rises, it's important to optimize our own water use and provide farmers with tools to do the same, while also helping them adapt in times of water scarcity.

In April 2014, we joined the UN Global Compact CEO Water Mandate, a publicprivate initiative designed to assist organizations in the development, implementation and disclosure of water sustainability policies and practices. Monsanto sits on the Mandate's 2015-16 Steering Committee – the initiative's main governance entity charged with strategic, administrative and financial arrangements.

In concert with others, we're developing seed systems that can thrive in areas



where drought conditions exist due to insufficient or irregular rainfall. We're also researching and testing different irrigation methods to help farmers water their fields more efficiently, and we're identifying and implementing creative ways to recycle and reuse water throughout our operations to reduce our reliance on fresh water.

Using Water More Efficiently

In 2014, Monsanto established a goal to increase irrigation water application efficiency across our global seed production process by 25 percent by 2020, compared to our 2010 baseline. This industry-first water use efficiency commitment includes both our owned and leased operations, as well as the



Our seed production irrigation water application efficiency increased to 73 percent in 2015.

contract farms that grow seed for our company's products. With an opportunity to save an estimated 30 to 80 billion gallons of water each year, we will share our learnings from pursuing this goal with our farmer customers so they too can make better use of this critical resource.

We're pleased to report that we've made important strides toward our goal by



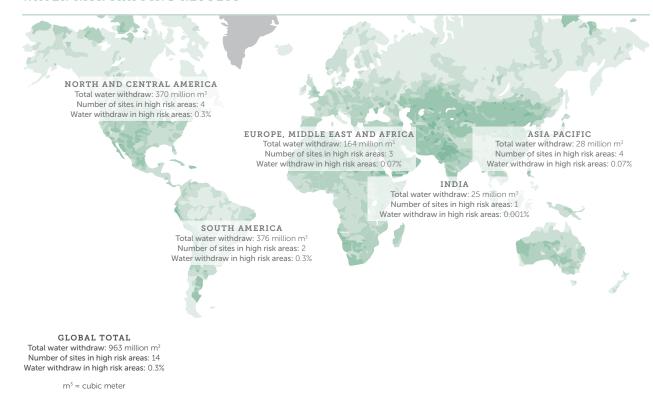
increasing our irrigation water application efficiency by 9 percent in 2015, compared to our 2010 baseline. We can attribute much of this progress to the launch of a pilot program in 2015 using advanced irrigation management techniques like satellite technology in Monsanto seed production locations in Argentina, Brazil, Chile and South Africa. These locations are in addition to our Hawaii, India and Mexico operations, which implemented these methods the prior year. Approximately 77 billion gallons of water were managed through these innovative solutions.

We're also working with farmers to help them use irrigation water more effectively. The USDA Agriculture Research Service, land grant university experts and Monsanto joined forces to develop a comprehensive irrigation handbook, which addresses a wide variety of irrigation concepts and questions for farmers.

Mapping Water Risks

Working in 57 countries, some of our facilities are located in water-stressed areas. To better understand how water availability might impact our operations and the surrounding communities and landscapes, we mapped water risks at all of our facilities across the

WATER RISK MAPPING RESULTS



Overall water risk identifies areas with higher exposure to water-related risks and is an aggregated measure of all selected indicators from WRI, including the physical quantity, quality and regulatory and reputational risk categories.

globe, including the areas where contracted growers produce seed for us. Using a globally recognized water-risk assessment tool from the World Resources Institute

(WRI), we were able to confirm which sites were at the greatest potential risk. Risk is calculated based on 12 indicators that evaluate three areas: quantity, quality



and regulatory and reputational risk. Through this assessment, 14 facilities were determined to be located in high risk areas, representing less than 0.3 percent of our total water withdrawal. Regional impacts are shown in the water risk map on the previous page.

Now that we have identified our high-risk facilities, we're taking a deeper look into them, reviewing current plans, completed projects and future plans and projects to mitigate our water risks. The risk mapping process will allow us to share best practices among our site teams and suppliers.

Over the past few years, we have done a lot of work in Hawaii using recycled wastewater from the local wastewater treatment plant for irrigation and converting to drip irrigation for much of our fields. We're looking to adopt a similar process in Juana Diaz, Puerto Rico, to reduce our reliance on fresh water there.

Better Understanding the Relationship of Irrigation on Modern Hybrids

Monsanto releases new corn hybrids annually that are incrementally better than previous

products in several ways, including production volume at harvest, insect resistance, herbicide tolerance, grain quality, plant health and stress tolerance.

To show the progress of hybrids over time, research trials were planted at the Monsanto Learning Center at Gothenburg, Nebraska, to test the effects of drought on corn hybrids from the 1970s, 1990s and today. Three different types of irrigation levels were evaluated. Results from this study indicate the modern-day corn seed -Genuity® DroughtGard® Hybrids with VT Double PRO®, RIB Complete® Corn Blend - produced significantly more grain across all water environments than the older hybrids. In addition, significant root lodging occurred in the older hybrids, which affected their harvest, while the modern-day hybrids had minimal root lodging.

The Learning Center is located on one of the most important water resources for agriculture in the United States, the Ogallala Aquifer. Because half the land there needs to be irrigated, while the other half doesn't, this location is ideal for studying water issues and management.



PROTECTING SENSITIVE HABITATS

At our phosphate mining operations in southeastern Idaho, we are pursuing a multifaceted water protection program that is aimed at protecting sensitive habitats within the Upper Blackfoot River watershed and species like the Yellowstone Cutthroat Trout. We have implemented a state-of-the-art water management program at our existing mine, ensuring that impacted runoff does not reach surface waters or habitats.

We are performing extensive studies on the environmental conditions of our former mines, with the goal of identifying and performing any remediation that may be appropriate. Looking beyond our mining operations, we are a member in the Upper Blackfoot Confluence, a partnership of industry and environmental nonprofits working together on regional projects to enhance wildlife habitat along the Blackfoot River.



WASH PLEDGE

In April 2014, Monsanto became the first agriculture company to sign the WBCSD WASH Pledge. This formalized our commitment to ensure that all Monsanto employees and directly-supervised contractors in all locations have access to safe water, sanitation and hygiene at the workplace.

In October 2015, we completed surveying all of our sites to identify any gaps associated with the WASH principles. We are developing and executing action plans that ensure full access to safe water, sanitation and hygiene across all our facilities.



BIODIVERSITY: PRESERVING SUSTAINABLE I.ANDSCAPES

All farms are part of a larger natural landscape.

In order to thrive, farming depends heavily on the resources that come from a healthy ecosystem: fresh water, healthy soil, beneficial pollinators and a stable climate that's conducive to crop growth. As the original stewards of the land, farmers understand this. At Monsanto, we work to promote sustainable landscapes by enabling sustainable agriculture intensification, which is the ability to grow more food on less land in a way that protects the environment. Our approach includes providing improved crop production systems, encouraging and enabling practices that use resources more efficiently with less environmental impact and engaging in partnerships aimed at preserving and restoring natural ecosystems and improving lives in rural communities.

Making the Connection: Agriculture and Biodiversity

Earth is home to millions of species of plants, animals and microorganisms that inhabit



the ecosystems responsible for providing food and other essentials for life. The vitality of agriculture and of communities around the world depends on healthy ecosystems that support biodiversity. According to the United Nations Convention on Biological Diversity, biological diversity is defined as the variability among living organisms from all sources including terrestrial and aquatic ecosystems and the ecological complexes of which they are part.

Agriculture and biodiversity intersect and interact in both positive and negative ways. Many people that work in agriculture recognize that crop production system changes need to evolve to effectively steward biodiversity on a landscape level. As a provider of agriculture technology, products and services, we acknowledge that we need to do more to preserve and protect biodiversity. Within

our organization and with key stakeholders, we continue to analyze and work to address where and how we intersect with biodiversity including our existing products, new technological innovations, partnerships and operations.

Some critics of modern agriculture challenge the practice of growing a single crop on a large swath of land - which they refer to as monoculture production. Their concern is that pests and disease to which that crop may be susceptible could build up, spread rapidly and pose risks to the entire harvest or require higher levels of pesticides in an attempt to save that crop. In consultation and engagement with a broad range of experts, we continually seek to better understand our role in the sustainable agriculture landscape to help develop policies and best management practices to address monoculture concerns.







Adopting conservation tillage and planting cover crops between primary growing seasons prevents soil erosion, stores carbon in the soil and contributes to soil health and biodiversity



Highly productive crops enable more food to be grown on less land, protecting forests and biodiversity



Forests and riparian buffers protect fresh water by filtering it and reducing sediment in rivers by holding onto soil thus maintaining ample water levels



Forests and crops absorb carbon from the air and store it in the soil, mitigating climate change and improving soil health



Pesticide stewardship reduces runoff and water pollution



Lands and forests provide homes for diverse plant, animal and insect species

Nutrient management protects against greenhouse gas emissions and loss of nutrients to waterways



Ag biologicals promote soil and plant health and fight pests

Clean water and ample river levels benefit farmers, communities and aquatic life



Crop rotation safeguards soil health and biodiversity

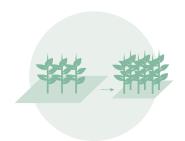


According to Agricultural Ecosystems Facts and Trends from the International Union for Conservation of Nature and WBCSD, agricultural producers can conserve and manage biodiversity and ecosystem services by "producing more output with less land; establishing or maintaining wildlife habitats and diverse land cover on farms and using farm management systems and stewardship approaches that improve ecosystem health".

We are involved in multiple initiatives designed to protect and improve biodiversity:

- We've been working with Conservation International since 2008 to preserve and restore critical forests in Brazil and, since 2013, in Indonesia to develop the Sustainable Agriculture Landscape Program. Together, we're also providing farmers with resources that help them grow more food on the same amount of land, reducing the motivation to turn forests into cropland. To learn more about this program, see the story on Page 64.
- We participate in the Round Table on Responsible Soy, which aims to encourage responsible soybean production that reduces social

WAYS TO CONSERVE AND MANAGE BIODIVERSITY AND ECOSYSTEM SERVICES









Produce more output with less land

Establish or maintain wildlife habitats

Establish or maintain diverse land cover on farms

Use farm management systems and stewardship approaches that improve ecosystem health

- and environmental impacts while maintaining or improving the economic status for the soy farmer.
- We're members of the Brazilian Coalition on Climate, Forests and Agriculture, a multi-stakeholder group that advances Brazil's agenda to promote conservation and sustainable use of forests, sustainable agriculture and the mitigation of and adaptation to climate change.

- We engage with the Earth Institute at Columbia University, which brings together people and tools needed to address some of the world's most difficult problems, from climate change and environmental degradation, to poverty, disease and the sustainable use of resources.
- We are involved in multiple initiatives to help protect the health of beneficial species like honey bees and monarch butterflies (see stories on Pages 67 and 68, respectively).





EMBRACING SUSTAINABLE LANDSCAPES

By Fitri Hasibuan, Project Manager, Conservation International Indonesia

Conservation International partners with companies like Monsanto to implement sustainable farming practices in areas of high biodiversity. We began conversations with Monsanto in 2006, urging them to do more to protect the biodiversity in farming regions around the world. They accepted the challenge.

I work on a sustainable agriculture project in Pakpak Bharat, North Sumatra, Indonesia, that aims to balance agriculture development and conservation of critical ecosystems. It is a mountainous region with dense forests and rivers, which villagers depend on for their livelihoods.

In 2013, we began a three-year, \$1.2 million project with Monsanto. In Indonesia, we're improving agricultural production, protecting biodiversity and enhancing the livelihood of smallholder farmers. This holistic approach is what we call maintaining a "sustainable agriculture landscape".

We engage local communities adjacent to critical forests to protect existing woodlands and reforest

areas that are compromised. These efforts target critical watersheds and degraded buffer zones – those spaces between the farmland and the forest. At the same time, we are helping smallholder farmers increase productivity on their existing land, rather than expanding their footprint.

Our work with Monsanto has impacted more than 800 local people. This project increases their skills with agriculture and conservation training, improves their access to agricultural inputs and local resources, and increases their incomes as their fields become more productive. We are seeing corn productivity increase anywhere from 30 to 100 percent. Farmers have increased their income by more than 34 percent, while at the same time cutting agriculture expenses in half. All the while, more than 2,000 hectares of forest are protected. With help from companies like Monsanto, we're making the sustainable landscape model work.

Part of our success is due to the open communication and mutual trust between Conservation International, Monsanto and the other stakeholders involved in this project. As an example, when we first started, Monsanto was looking primarily to improve corn productivity in Pakpak Bharat. However, after we studied the local landscape and farmers' needs, we determined that focusing just on corn was not ideal. We collaborated with Monsanto to incorporate



additional commodities well suited for the region, including coffee (a crop for which the company does not sell seeds). That demonstrated to me that Monsanto was in this for the greater good, not just for the good of the company.

We're also working with Monsanto in Brazil to preserve and restore habitats in the Cerrado Plains Region, working toward similar objectives. Monsanto even produced a wonderful <u>video</u> on our work together there to create a sustainable landscape.

Both these projects are unique in the way they view farms and forests as one interdependent landscape. In the future, I believe we can expand this model and achieve even more. The Monsanto/Conservation International Sustainable Agriculture Landscapes Partnership could offer a replicable and scalable model for sustainable agriculture and conservation practices.



Exploring the Benefits of Healthy Soil

When it comes to delivering a robust harvest, the soil beneath our feet plays an incredibly important role. We can grow more food, but we can't grow more land. Healthy soil provides nutrients, retains moisture, stores carbon and helps protect fresh water.

Soil is a complex ecosystem with a vast world of microorganisms that make it possible for plants to grow. We're all still learning about soil and finding new ways to harness its power to grow strong and healthy plants. That's why Monsanto has invested significantly in better understanding healthy soils and the farming practices that promote them, both through our purchase of the soil analysis business of Solum, Inc. in 2014, and through key research partnerships.

One of the flagship research efforts we support is the Soil Health Partnership. Please read the article by its Director, Nick Goeser, on Page 66.

In addition, Monsanto provides funding and technical resources to other collaborations focused on soil health research.

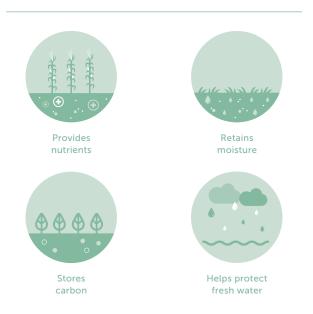
Intelligent Landscape Design Project. In 2015, Monsanto joined a five-year initiative led by the **Department of Energy** and **USDA** Agricultural Research Service that applies data science modeling tools to local soil health data. This approach could give farmers the precision to target areas as small as 900 square feet with soil management practices.

Sustainability Research Program. Formed in partnership with the Agronomic Science Foundation, this program funds new university research into the role cover crops play in soil health, crop productivity and sustainable agriculture practices. Monsanto provides funds for seeds and other inputs, as well as soil analysis of all fields involved in the research.

Resilient Economic Agricultural Practices (REAP). Working with the Agricultural Technology Innovation Partnership Foundation, Monsanto and five other organizations founded REAP to close a critical funding gap in USDA soil research. REAP sustains long-term research on land management practices and soil health across the varied U.S. landscape.



HEALTHY SOIL BENEFITS







DIGGING INTO SOIL HEALTH

By Nick Goeser, Ph.D., Director, Soil Health Partnership and Director of Soil Health and Sustainability, National Corn Growers Association

We know that healthy soil can lead to better harvests and promote environmental stewardship. And we know that practices like optimizing nutrient application, planting cover crops and reducing tillage play an important role in this. What we need to keep exploring, though, is how to make these and other farming practices work together to create the best possible outcomes for farmers, society and the environment.

I like to rise early – and what gets me up in the morning is my role as director of the Soil Health Partnership, an initiative of the National Corn Growers Association supported by the Walton Family Foundation and Monsanto with scientific advising from environmental groups, U.S. Department of Agriculture's Agriculture Research Service and several university soil experts.

What we've accomplished in the two years since our launch is quite encouraging – and very

COVER CROPS

HOW DO THEY WORK?







KEY BENEFITS



Absorbs Rain Better



Combats Soil Erosion



Enriches Soil Quality

Cover crops are planted after the harvest of a primary crop.

exciting. Today our network includes more than 40 demonstration farms that collect data and serve as showcases for other farmers to investigate innovative soil management practices. I am confident that we'll reach 100 farms by 2019, adding to the thousands of soil health data points we've already collected.

One of our partner farmers – Tim Smith – recently received the White House Champions of Change award for "Sustainable and Climate-Smart Agriculture". He was recognized for implementing farming practices that improve soil health and water quality, as well as for teaching others what he's learned, a principle objective of this initiative. Tim's success is just one concrete example of how our program is gaining momentum.

I'm inspired by the interest people have shown in our research. Hundreds of farmers, students and others have attended our Soil Health Field Days throughout the Midwest. In fact, we estimate we doubled attendance this past year at these important outreach efforts. These events offer hands-on demonstrations, provide information on soil health and point out local resources. The farmers I've met are eager to understand the variety of tools available to them and how soil health impacts their fields, their livelihoods and the environment.

Our research and events will reach thousands of farmers and their agronomic advisors in the coming years, influencing the way farms are managed across the United States and beyond. And that's definitely worth waking up for every day.



Heightening Honey Bee Health

Honey bees help produce one in three bites of our food, but face many challenges that have caused their populations to fluctuate. However, such fluctuations pose a threat to a nutritious, accessible food supply around the world. Scientists and researchers are striving to better understand why this is happening and have identified the parasitic varroa mite as one of the major causes. We are working hard, alongside others, to find solutions to this complex challenge.

Honey Bee Health Coalition. As part of our Commitment to Action on honey bee health that we made in conjunction with the Clinton Global Initiative in 2013. we continue to play an active role in the <u>Honey Bee Health Coalition</u> (HBHC) convened by The Keystone Policy Center.

In 2015, the HBHC built on the momentum of its first full year and now represents more than 30 members from nonprofits, government, academia and business. The Bee Healthy Roadmap, unveiled in 2014, guides how we can improve the health of pollinators while still meeting the needs of farmers and preserving nature. Some of the recent progress made by the HBHC includes:

- Improving Honey Bee Nutrition Our help organizing the HBHC's Forage & Nutrition Working Group led to an important dialogue with the president's Pollinator Health Task Force and the potential for collaboration on pollinator issues.
- Investing in Research and Development (R&D) for Varroa Control - Since 2013, Monsanto invested more than \$4 million in R&D related to varroa mites - the single largest factor in the decline of honey bees. Monsanto also helped develop a guide to varroa management downloaded by more than 5,000 people from more than 100 countries.
- Bee Understanding Project Monsanto provided initial funding to form the Bee Understanding Project, which lets beekeepers, growers, entomologists and crop advisors swap jobs to see honey bees from another expert's perspective. Launched in early 2015, the project's first job swap is featured in a documentary video.
- Economic Empowerment of Beekeepers -In July 2014, Monsanto sponsored a panel of female beekeepers at the Eastern Apicultural Society Conference. Soon after, we developed the Angels of Apiculture program to introduce young women in Appalachia to beekeeping.



Honey Bee Advisory Council. We formed the Monsanto Honey Bee Advisory Council (HBAC) to engage outside experts for guidance on our honey bee health research and programs. HBAC members include:

- David Mendes, commercial beekeeper and past president of American Beekeeping Federation
- Gus Rouse, honey bee queen breeder and owner of Kona Queen Hawaii. Inc.
- Larry Johnson, row crops farmer and commercial beekeeper
- Gene Robinson, Ph.D., University of Illinois at Urbana-Champaign
- Dennis vanEngelsdorp, PhD., Entomology, University of Maryland
- Pete Berthelsen, Director of Habitat Partnerships, Pheasants Forever



Supporting the Flight of the Monarch

Of the thousands of species of butterflies, the monarch is the most iconic and widely recognizable. Every year, millions of monarch butterflies migrate across North America. But, fewer monarchs are completing the journey. We now know that reduction in milkweed habitat is one of the many factors limiting their recovery. Milkweed is the only habitat in which monarchs lay their eggs and caterpillars feed.

To address this issue, Monsanto is supporting monarch research, education and habitat restoration to help find ways for both farmers and monarchs to flourish. The cornerstone of this support is a \$3.6 million contribution over three years to the National Fish and Wildlife Foundation's Monarch Butterfly Conservation Fund. This partnership funds habitat restoration, education, outreach and milkweed seed production to benefit monarch butterflies. In September 2015, the Fund announced 23 grants to support the restoration of up to 33,000 acres of monarch habitat in strategic migration areas.

We've also offered an additional \$500,000 in grants to support several other partners and their initiatives, including the Keystone Policy Center Monarch Butterfly Collaborative, University of Kansas' Monarch Watch, the

MONSANTO'S MONARCH GOALS





Milkweed

Change

Iowa Monarch Conservation Consortium. Pheasants Forever, the University of Guelph, and the University of Illinois at Chicago Energy Resources Center.

In our own backyard, we're establishing and expanding monarch habitats at 50 of our facilities, including three of our learning centers, with another 20 planned. The learning center habitats will help support the outreach components of the plan.

Monsanto also encourages a diverse group of public and private sector stakeholders to join the Keystone Policy Center Monarch Butterfly Collaborative – an effort to connect the agriculture supply chain with conservationists, farmers, scientists and landscape professionals from across the country to coordinate and scale solutions to the challenges facing monarchs and pollinators.

Enabling Responsible Pest Control

There's no single right way for every farmer to protect their fields from weeds, insects and diseases. And it wouldn't be good for farms, food or the environment to use any one solution exclusively on its own or in excess. Monsanto is committed to developing a diverse range of crop protection solutions, offering farmers more precise ways to apply the right protection in a more targeted way.

In some cases, this means limiting traditional pesticide sprays. For example, farmers can plant seeds within a protective shell so they can spray the surrounding fields less or not at all. Another technology, which Monsanto is developing under the name BioDirect™, stimulates a natural process that already exists within plant cells, so plants can develop traits to defend themselves against pests.

We offer farmers different tools so they can adapt their approach accordingly, using only what's necessary to give their crops the best chance of survival. Modern tools powered by data science, like GPS guidance on sprayers and site-specific application methods, can also help farmers use pesticide more efficiently. We will continue to develop better ways to target protection even more narrowly, so farmers can protect their crops as safely and precisely as possible.

These advances increasingly allow farmers to apply the right protection, in the right amount, in the right place, at the right time.

Weed Resistance. Weeds have been a primary challenge for farmers since the dawn of agriculture, and resistance to various methods of crop protection has always been a part of that challenge. Today, herbicides play an important role in helping farmers control weeds, but if a weed control program is not sufficiently diverse, there is potential for the development of resistant populations that can lead to a decline in a single herbicide's effectiveness to control a weed population.

While it's impossible to prevent resistance altogether, a systematic approach to durable weed control in fields using multiple tools can make it manageable. Following label recommendations and the use of multiple herbicides with diverse mechanisms of action

MORE PRECISION FOR BETTER HARVESTS

Glyphosate-based pesticides work best when they're used in the right place, at the right time and in the right amounts. This precision helps farmers use resources more efficiently when growing safe, healthy food.



RIGHT PLACE

Modern tools like GPS guidance on sprayers and site-specific nozzles help farmers target pesticide applications.



RIGHT TIME

Pest and weed levels change every season, so farmers adapt to use only what's necessary.



RIGHT AMOUNT

It doesn't take much pesticide to be effective. In fact, pesticide sprays are more than 95% water.

in the agricultural production cycle can delay the onset of resistance and help control resistant weeds that may exist in a field. Furthermore, proper management of weeds requires that we develop and share best farming practices, such as crop rotation, and that we use more advanced information tools to maximize efficiency.

We are putting forth a cost-effective system, under the Roundup Ready PLUS® umbrella, that works across farms as well as various crops, geographies and technologies to help manage pests. Roundup Ready PLUS® places an emphasis on using durable herbicides, from Monsanto and other companies, to provide the best combinations to manage tough weeds throughout the growing season.

Pending regulatory approval, we're planning to introduce new cropping systems for corn, soybeans and cotton that include seeds with biotech traits tolerant to two or three active herbicide ingredients in combination, including dicamba, glyphosate and glufosinate. This would allow farmers to have more flexibility in the herbicide products they use, and help them manage resistant weed populations on their farm.

Learn more about <u>glyphosate</u> on our website, and read more about studies on the safety profile of glyphosate on Page 87.



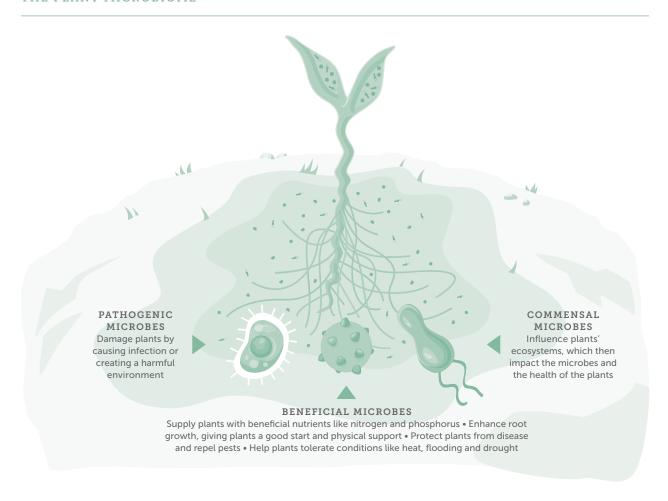
Researching Natural Solutions for Plant Health and Pest Control

Our Agricultural Biologicals platform includes the work we're doing as part of the BioAg Alliance, which uses microbes to improve plant and soil health and protect against pests, and the research we're conducting as part of our BioDirect™ technology product pipeline, which taps into natural processes for pest control. These products are designed to complement or replace other chemical options to help farmers improve their harvests while stewarding the environment.

The BioAg Alliance. This unique partnership between Monsanto and Novozymes is focused on research and development of products based on beneficial microorganisms like bacteria and fungi to provide farmers with sustainable agricultural solutions. Microbes can have a significant impact on plant and soil health, improving nutrient uptake, promoting growth and increasing productivity. They may also protect against destructive insects and provide disease protection.

Combining Novozymes' industry leading expertise in the discovery, formulation and fermentation of microbes with Monsanto's extensive field testing experience and commercial network brings an unmatched

THE PLANT MICROBIOME



level of R&D to the development of new microbial products. The BioAg Alliance is focused on bringing solutions to meet the agronomic needs of today and tomorrow. And, with our combined efforts, we are uniquely positioned to be the leader for discovery, development, production and commercialization of microbial solutions in agriculture.



The BioAg Alliance is currently running the world's largest microbial research program to develop the next generation of these products. In 2015, the Alliance tested more than 2,000 microbial strains across 500,000 field trial plots in more than 50 locations in the United States. Results from the U.S. field trial program showed that the top new microbes increased corn yields by an average of four to five bushels per acre and soy yields by an average of 1.5 bushels per acre.

The BioAg Alliance expects to continue testing thousands of strains across a broad range of environments in extensive U.S. field trials in 2016.

Today, the BioAq Alliance's products are used on around 65 million acres, but Monsanto and Novozymes envision that its products will be used on 250 to 500 million acres globally by 2025

BioDirect™ Technology. Using our understanding of pest and plant genomes, we're able to use naturally occurring processes to specifically target pests that negatively impact crops.

Our BioDirect™ technology uses a process called Ribonucleic Acid (RNA) interference, or RNAi, to manage the production of a specific protein in its target. Occurring naturally in the environment, RNA is a fundamental building block of every

living thing on the planet. The accuracy of this approach means it can be very effective in small quantities, which significantly limits the likelihood of negatively affecting crops or wildlife.

Our BioDirect™ research focuses on key challenges farmers face today. One research project aims to control varroa mites and viruses that adversely affect honey bee health. Other projects could help safeguard crops from Colorado potato beetle infestations, improve plant health with protection from tospoviruses and help manage glyphosate-resistant weeds.

Visit our website to learn more about our Ag Biologicals pipeline, including the BioAg Alliance and BioDirect™.

BIOAG ALLIANCE U.S. FIELD TRIAL PROGRAM RESULTS



Results from the U.S. field trial program showed that the top new microbes increased corn yields by an average of 4-5 bushels per acre



Results from the U.S. field trial program showed that the top new microbes increased soy yields by an average of 1.5 bushels per acre



GUIDING AND AUDITING OUR ENVIRONMENTAI. PERFORMANCE

Our Environmental Management Guidelines highlight our commitment to environmental management systems like ISO 14001. Notably, 100 percent of our global crop protection chemical production sites are externally validated through the ISO 14001 or RC14001® certification program. This requires formal processes in identification of environmental impacts, routine internal auditing and corrective actions, and management review. All of our seed production locations have comprehensive environmental management systems, and several of them are also ISO 14001 certified. These management systems have been developed and implemented by teams of environmental professionals, based at headquarters and at our global sites, who are focused on universal compliance with legal requirements, company policy and continuous improvement.

Monsanto's auditing program is another important tool for driving environment, safety and health (ESH) excellence.



We periodically audit all of our manufacturing and research and development locations to ensure compliance with ESH legal requirements as well as company ESH policies.

Every audit, each of which is conducted by ESH professionals specifically trained on auditing, entails thousands of questions designed to identify findings. For every finding, a team of ESH professionals from the audited site and headquarters develops a corrective action plan with an identified due date. This team drives the finding to closure. In addition to reviewing and overseeing the entire audit process, upper management also commissions an external review of our program to ensure it incorporates industry best practices.

We regularly report the progress of our corporate audit program and completion status of corrective action plans to the highest levels of management and our board of directors. We review our audit findings collectively to identify opportunities for improvement, both at our sites regionally and globally. Beyond the corporate audit program, sites conduct more frequent self-audits (with corrective action tracking and reporting to management) as part of their ESH management system. This robust approach to ESH auditing gives a high degree of assurance that Monsanto's operations comply with legal requirements and company policy.



ENERGY USE AND EMISSIONS	CROP PRO	TECTION	SEEDS & TRAITS		COMPANY VEHICLES		COMPANY TOTAL	
	FY'14	FY'15	FY'14	FY'15	FY'14	FY'15	FY'14	FY'15
Direct Energy Consumption (1000 GJ)								
Natural Gas and Other Gaseous Fuels	*5,430	6,230	2,960	2,800	-	-	*8,390	9,030
Oil (including Diesel)	526	423	*1,050	891	1,760	2,210	3,330	3,530
Coal, Coke and other Solid Fuels	1,010	1,360	3.9	0.2	-	-	1,010	1,360
Waste Fuel	2,190	2,590	-	-	-	-	2,190	2,590
TOTAL	*9,150	10,600	4,010	3,690	1,760	2,210	*14,900	16,500
Biomass Fuels Used in Direct Energy Generation	200	133	811	704	-	-	1,010	837
Biomass Fuels Shipped Off-Site for Energy Generation	1.4	1.6	3,120	1,990	-	-	3,130	1,990
Purchased Electricity	6,940	6,910	1,850	1,880	-	-	*8,790	8,780
•			,	1,880	-	-		
Imported Steam	*1,980	2,070	7.1	-	-	-	*1,980	2,070
TOTAL	*8,920	8,980	1,860	1,880	-	-	10,800	10,900
Consumed Primary Sources in Electricity Generation (percent of total Indirect Energy)								
Hydro, Biomass, Geothermal, Nuclear, Solar, Wind	50%	49%	35%	37%	-	-	46%	46%
Natural Gas and other Gaseous Fuels	18%	18%	18%	19%	-	-	18%	18%
Coal, Coke and other Solid Fuels	32%	31%	41%	38%	-	-	34%	33%
Oil (including Diesel)	1%	1%	7%	6%	-	-	3%	3%
Energy Congumntion Cummary (4000 CT)								
Energy Consumption Summary (1000 GJ)								
Energy Consumption Summary (1000 GJ) Total Energy Consumption (Direct and Indirect)	*18,100	19,600	*5,870	5,560	1,760	2,210	*25,700	27,400

KEY FOR ENVIRONMENTAL DATA TABLES

GJ = gigajoules * MT = metric tons * ML = 1,000 cubic meters * m³ = cubic meters * CO₂ = carbon dioxide * CO₂ = carbon dioxide equivalent * NO₂ = nitrous oxide * CO₂ = carbon dioxide * CO₂ = carbon dioxidPO₄ = phosphate * SO_x = sulfur oxide * VOC = volatile organic compound * POTW = Publicly Owned Treatment Works * - = Not Applicable or Data Not Collected

Reported data in the environmental tables are rounded to three significant digits or, for small values, presented as no less than one-tenth the indicator reporting unit. This approach enhances data usability while providing sufficient detail without becoming numerically cumbersome.

*Fiscal year 2014 items noted were updated from what was previously reported to reflect corrections and/or changes to the data or calculation methodology.

Energy and greenhouse gas intensity ratios using annual net revenue were up in fiscal year 2015 due to lower annual revenue when comparing fiscal year 2015 to fiscal year 2014.



ENERGY USE AND EMISSIONS	CROP PROT FY'14	TECTION FY'15	SEEDS 8 FY'14	TRAITS FY'15	COMPANY VI FY'14	EHICLES FY'15	COMPAI FY'14	NY TOTAL FY'15
Energy Consumption Outside the Organization - Scope 3 (1000 GJ)								
Logistics and Business Travel	-	-	-	-	-	-	5,950	4,990
Contracted Land - Fuel & Electricity	-	-	-	-	-	-	*2,330	1,940
Biomass Fuels Used in Direct Energy Generation Biomass Fuels Shipped Off-Site for Energy Generation	-	-	-	-	-	-	*1.6 *7.6	1.6 7.6
Energy Intensity (GJ per \$1,000 Revenue)								
Total Direct and Indirect Energy Intensity (Scopes 1 & 2)	-	-	-	-	-	-	*1.62	1.82
Total Direct GHG Emissions - Scope 1 (1000 MT)								
Direct GHG Emissions (CO ₂ e)	*1,250	1,180	*240	219	118	148	*1,610	1,540
GHG Emissions from Biomass Fuels								
• CO ₂ e from Biomass Used (Consumed) On-Site	24.0	16.0	88.2	76.6	-	-	112	92.6
• CO ₂ e from Biomass Sold for Off-Site Energy Generation	*0.2	0.2	*194	222	-	-	*194	222
Total Indirect GHG Emissions - Scope 2 (1000 MT)								
Indirect GHG Emissions (CO ₂ e)	*959	964	*288	277	-	-	*1,250	1,240
Total Direct and Indirect GHG Emissions (1000 MT)								
Total GHG Emissions (CO ₂ e) (Scopes 1 & 2)	*2,210	2,140	*527	496	118	148	*2,850	2,790
Other Indirect GHG Emissions Sources - Scope 3 (1000 мт)								
Logistics and Business Travel	-	-	-	-	-	-	443	371
Contracted Land	-	-	-	-	-	-	*203	162
GHG Emissions from Biomass Fuels								
CO ₂ e from Biomass Used (consumed) On-Site	-	-	-	-	-	-	*0.6	0.4
• CO ₂ e from Biomass Sold for Off-Site Energy Generation	-	-	-	-	-	-	0.5	0.6



ENERGY USE AND EMISSIONS	CROP PRO FY'14	TECTION FY'15	SEEDS 8 FY'14	& TRAITS FY'15	COMPANY VEI FY'14	HICLES FY'15	COMPAN FY'14	Y TOTAL FY'15
GHG Emissions Intensity (MT per \$1,000 Revenue)								
Total Direct and Indirect Emissions (CO ₂ e) (Scopes 1 & 2)	-	-	-	-	-	-	*0.180	0.186
Other Emissions (MT)								
Sulfur Oxide (SO _x) Emissions, Combustion and Process	1,560	1,520	*43.0	38.2	-	-	1,610	1,560
Nitrogen Oxides (NO _x) Emissions, Combustion and Process	3,110	3,280	653	693	-	-	3,770	3,970
Volatile Organic Compound (VOC) Emissions	92.8	93.0	0.9	-	-	-	93.7	93.0

Greenhouse Gas emissions (GHGs) are calculated using various standardized emissions calculation methodology and factors, including the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol, USEPA GHG Reporting Program and Emission Factors, USEPA eGRID, IEA Country Specific factors and other site or case specific factors and calculations as reviewed by our third-party assurance auditors.

WATER USE	CROP PR FY'14	OTECTION FY'15	SEEDS FY'14	8 & TRAITS FY'15	CONTRAC FY'14	CTED LAND FY'15	COMP/ FY'14	ANY TOTAL FY'15
Fresh Water Withdrawal (ML - 1000 m³)								
Surface Water	2,300	2,020	*8,260	8,130	451,000	382,000	*460,000	391,000
Ground Water	*19,100	19,000	*10,800	10,600	433,000	272,000	*463,000	301,000
Municipal Water	1,370	1,340	*6,810	6,000	37,800	23,000	*46,000	30,300
Collected Rainwater	110	87.2	*279	275	58.7	4.0	*448	366
Purchased Wastewater for Reuse (R1)	0.0	0.0	212	186	681	675	893	861
Purchased - Bottled or Lab Water	0.7	0.6	3.2	3.6	0.9	0.8	4.8	5.1
TOTAL	22,900	22,500	26,400	25,200	921,000	676,000	970,000	724,000
Water Reuse and Recycling (ML - 1000 m³)								
Volume of Condensate/Cooling Tower Water Recycled/Reused	*345,000	334,000	31,800	2,820	-	-	*376,000	337,000
Volume of On-Site Process Wastewater Recycled/Reused	*3,700	3,390	85.3	52.4	-	-	*3,790	3,450
TOTAL	*348,000	337,000	31,900	2,870	-	-	*380,000	340,000



WATER USE	CROP PRO FY'14	OTECTION FY'15	SEEDS FY'14	S & TRAITS FY'15	CONTRAC FY'14	TED LAND FY'15	COMPA FY'14	NY TOTAL FY'15
Process Wastewater Discharged (ML - 1000 m³) (Process wastewater only; does not include domestic sewage, per GRI Guidelines)								
Discharged to Off-Site Treatment (e.g. publicly owned treatment works)	635	720	469	409	-	-	1,100	1,130
Permitted Discharges to the Environment - Subsurface (e.g. deepwell/leachfield)	1,980	2,020	*_	-	-	-	1,980	2,020
Permitted Discharges to the Environment - Surface Water (e.g. river)	16,200	16,000	*259	255	-	-	16,500	16,300
TOTAL	*18,900	18,800	*728	664	-	-	19,600	19,400
Process Wastewater Quality Data for Direct Surface Water Discharges (MT)								
Biological Oxygen Demand	54.0	52.3	-	-	-	-	54.0	52.3
Nitrate (as N)	53.8	55.5	-	-	-	-	53.8	55.5
• Phosphates (as PO ₄)	217	216	-	-	-	-	217	216
Total Suspended Solids (TSS)	63.4	37.6	-	-	-	-	63.4	37.6
WASTE	CROP PRO FY'14	PTECTION FY'15	SEEDS FY'14	S & TRAITS FY'15	CONTRAC FY'14	TED LAND FY'15	COMPA FY'14	NY TOTAL FY'15
Total Waste (MT)								
Energy recovery	203	608	36,200	7,520	1.2	1.2	36,400	8,120
Incineration	3,580	3,500	12,100	9,460	6.8	3.4	15,700	13,000
Landfill	8,600	7,060	21,000	17,600	966	460	30,500	25,100
Other	73.3	17.8	4,080	303	3,000	-	7,160	285
Reuse/Recycle/Composting	7,940	7,300	146,000	84,800	70,200	25,500	224,000	118,000
Total Hazardous Waste	2,680	2,930	8,260	6,320	10.8	7.1	10,900	9,250
Total Non-Hazardous Waste	17,700	15,600	211,000	113,000	74,200	26,000	303,000	155,000
TOTAL	20,400	18,500	219,000	120,000	74,200	26,000	314,000	164,000

Waste Shipped Off-Site or Composted

The total waste shipped off-site or composted in fiscal year 2015 was 164,000 metric tons. The significant reduction in waste generation for the Seeds and Traits division and Contracted Growers/Land was mainly due to a lower production amount of seeds for fiscal year 2015 compared to fiscal year 2014 and the associated fewer acres that were planted. This resulted in an approximate 50 percent reduction in waste generation. It is expected that this trend will reverse next year with the current production plan for fiscal year 2016. Waste classified as hazardous was also reduced compared to fiscal year 2014. Hazardous waste was not exported or imported by Monsanto across country borders.



Placing high ethical standards, effective corporate governance, responsible product stewardship and transparent reporting at the center of the way we operate our business.

As a global, publicly traded company, we hold ourselves to the highest of standards. Our governance framework and policies serve as checks and balances as we set and pursue our goals, monitor our progress and continue to improve ourselves. We're committed to being a force for good in our work with individuals, organizations and communities and to have a positive impact on society while returning value to our shareowners.

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OUR CORPORATE GOVERNANCE FRAMEWORK

Monsanto is committed to high ethical standards and the values of effective corporate governance.

Corporate governance touches all aspects of our company and is an important part of both who we are and how we conduct ourselves every day. Our governance framework gives our highly experienced directors the structure necessary to provide appropriate oversight to the company.

This section focuses on the responsibilities and actions of the Sustainability and Corporate Responsibility Committee (SCRC) of our board of directors and provides a high-level overview of our corporate governance structure, as well as key corporate governance activities undertaken since the beginning of 2015. Additional information can be found in the governance sections of our 2015 Proxy Statement and website. Links to specific information are included in the GRI G4 Index of this report, beginning on Page 97.

Sustainability and Corporate Responsibility Committee

Central to Monsanto's commitment to sustainability is oversight from our board of



directors, particularly its SCRC, which is charged with reviewing and monitoring the company's sustainability performance and risks. In this capacity, the SCRC represents and reports back to the full board of directors.

The experience and expertise of SCRC members span multiple industries and disciplines including food, energy, agriculture, government, academia, technology, healthcare and consumer goods. These diverse backgrounds help ensure that the committee has a comprehensive view of the sustainability issues that impact our company, the environment, communities, customers and other key stakeholders.

The SCRC reviews the company's sustainability goals and reporting and meets periodically with stakeholders to hear external perspectives

RECENT KEY CORPORATE GOVERNANCE DEVELOPMENTS

- We added Patricia Verduin, Ph.D., to our board of directors, which is now composed of 23 percent female directors.
- We adopted a proxy access bylaw amendment to enable eligible Monsanto shareowners to have their own director nominee included in the company's proxy materials, along with candidates nominated by our board of directors. As a result of the continued evolution of practice regarding proxy access implementation, we amended the provision in a manner that eliminates certain restrictions and conditions on use of the provision by eligible shareowners.
- We enhanced public disclosures regarding political spending and lobbying activities.



and identify and investigate significant emerging issues. The committee members also receive and discuss periodic reports on our business conduct program, progress related to our Human Rights Policy, our charitable donations and commitments and political contributions and lobbying activities.

The SCRC considers and approves funding for our corporate political activities and appoints members of our senior management to our Good Government Fund Advisory Panel to ensure that our corporate political spending consistently operates and complies with applicable laws and supports our overall goals and strategic objectives.

In fiscal year 2015, the SCRC met five times and reviewed and discussed many of the topics covered throughout this report and other Monsanto sustainability communications. The committee approved this report, which included the sustainability materiality assessment conducted in fiscal year 2015 and early fiscal year 2016. Some of the specific matters discussed by the SCRC in 2015 included climate action, consumer food and nutrition, human rights, biodiversity, external stakeholder engagement, collaboration and

input from a farmer panel. The committee is also responsible for reviewing and considering such topics as biotechnology approvals and product launches, GMO labeling and the company's reputation. For more information, see the Sustainability and Corporate Responsibility Committee charter.

Engaging with Shareowners

We engage in dialogue with our major shareowners throughout the year about various corporate governance topics, including executive compensation and sustainability. We encourage shareowners to contact our board, independent lead director or corporate secretary through our website or regular mail at the following address:

Monsanto

c/o David F. Snively, Corporate Secretary (for our lead independent director use: c/o Office of the Lead Director) 800 North Lindbergh Boulevard, Mail Stop A3NA St. Louis. MO 63167



MONSANTO ADDS SCIENTIST TO BOARD OF DIRECTORS

Considering different perspectives is fundamental to good corporate decision making, which is why we strive to ensure diversity in our board of directors.

In 2015, Patricia Verduin, Ph.D., joined the Monsanto board. Dr. Verduin serves on the Science and Technology and Sustainability and Corporate Responsibility Committees. As a scientist, she brings a wealth of expertise to these roles. Since 2011, she has been the chief technology officer of Colgate-Palmolive Company. Prior to joining Colgate, she was senior vice president and chief science officer for the Grocery Manufacturers Association, and senior vice president of product quality and development at ConAgra Foods, Inc.

The addition of Dr. Verduin follows the election of Monsanto's first international director, Marcos M. Lutz, in 2014.



CORPORATE GOVERNANCE AT A GLANCE

Board Independence	 12 out of 13 of our directors are independent. Our CEO is the only management director.
Board Composition	 The board is composed of 10 men and three women, including one African-American member and one member from outside the United States. The board is composed of three members between the ages of 30-55, and 10 members over the age of 55. The board regularly assesses its performance through board and committee self-evaluation. The nominating and corporate governance committee leads the full board in considering board competencies and refreshment in light of company strategy.
Board Committees	 We have seven board committees – executive, audit and finance, nominating and corporate governance, people and compensation, restricted stock grant, science and technology, and sustainability and corporate responsibility. With the exception of the executive committee (our chairman and CEO serves on this committee) all other committees are composed entirely of independent directors.
Leadership Structure	 Our chairman is CEO of our company. He interacts closely with our independent lead director. The independent board members elect our lead director annually. Among other duties, our lead director chairs executive sessions of the independent directors to discuss certain matters without management present.
Risk Oversight	 Our full board is responsible for risk oversight and has designated committees to have particular oversight of certain key risks. Our board oversees management as management fulfills its responsibilities for the assessment and mitigation of risks and for taking appropriate risks.

Driving Ethical Conduct and Corporate Citizenship **Throughout Our Business**

Open communication with our employees and business partners is critical. We work together to address difficult workplace situations and concerns. Through our

board-chartered global Business Conduct Office (BCO), we implement ethics and compliance initiatives and directives. As allowed by local law, employees may submit questions or voice concerns to the BCO via an internal toll-free telephone number, an email address or through a third-party provider to ensure caller anonymity.

In 2015, we addressed a total of 393 inquiries, 265 of which were requests for guidance regarding compliance and business ethics, and 128 were comments about work environments, stewardship of corporate assets and observed behaviors that might be inconsistent with our policies or codes of conduct. Of these inquiries, three were allegations of discrimination. All three were investigated, and none required intervention or further remediation. During the fiscal year, eight allegations related to our Human Rights Policy were made in categories other than discrimination. Five of these were resolved, and three were found to be unsubstantiated upon investigation. Resolutions ranged from job reassignments to coaching and process remediation.

Our annual compliance certification provides an additional opportunity to ensure we are in compliance with our policies and codes of conduct. In 2015, over 99 percent of our global employees completed the certification process. We will ensure the remaining 1 percent completes the certification and will investigate any reports of potential noncompliance with codes or policies. In previous years we have achieved 100 percent completion and compliance, and it's our intention to ensure that this is achieved.



Reaching Our Business Units.

Uncompromising integrity is a process of continuous improvement. While we've long collected enterprise-wide information on employee conduct, in 2015 we began issuing business conduct management reports at the individual business unit level. This will enable management to better understand trends specific to their operations and determine the need for employee training and policy or process modification or controls in time to incorporate responses into the following year's goal document and professional development process.

Leading With Integrity. Ethical business conduct is the responsibility of every employee, and it is up to management to lead by example. That's why in 2015 we developed a new training series aimed at emerging leaders within the company, but available to all employees. The Monsanto Ethical Leadership Professional Development Series is designed to promote a culture of ethics and provide opportunities for career enhancement. We refreshed and deployed the anti-corruption training course for employees who were identified as having the potential to interact with government officials.

Preventing Corruption. Anti-corruption policies and procedures have been communicated to all 13 members of our board of directors, 100 percent of our employees and 100 percent of our business partners with procurement origination or renewal in the last 24 months through our Supplier Code of Conduct. Anti-corruption training has been provided to 100 percent of our employees with decision authority.

Political Contributions

Participating constructively and transparently in the political process is essential to our company's long-term success. We contribute to U.S. political candidates and industry and trade groups in a manner compliant with all applicable laws and reporting requirements. The Sustainability and Corporate Responsibility Committee of our board of directors oversees political contributions. In 2015, the Center for Political Accountability (CPA), a nonpartisan, nonprofit organization that brings transparency and accountability to corporate political spending, ranked Monsanto and several other companies number three out of a universe of 500 companies included

on the CPA-Zicklin Index. The 2015 ranking recognizes our efforts to increase and clarify the information we share on the political disclosures portion of our website.

Engaging with Our Neighbors

With more than 400 production, manufacturing, R&D and office facilities around the world, we are part of many local cultures, communities and villages. Being a good community citizen has always been a priority, and Monsanto has a long record of collaborating with our neighbors.

We formally engage in some communities through Community Advisory Panels (CAPs). CAPs include local residents and community leaders who meet regularly with representatives from our facility management team to discuss Monsanto's operations in the community, environmental concerns, safety, emergency preparedness, community involvement and any other issues. Each group solicits feedback and counsel from neighbors and works to build meaningful relationships within the communities surrounding our plants, helping us inform our operational decision making.



Formal CAPs have been established at all our chemical manufacturing facilities and new groups are launched based on local stakeholder needs and interests. As of 2015, we have established CAPs in Argentina, Belgium, Brazil, Puerto Rico and the United States.

While CAPs work well in some areas. we want to make sure we are tailoring our engagement to meet the needs of the local communities. That's why in fiscal year 2015 we embarked on an effort to assess our current community efforts, explore the needs of the local communities and identify how Monsanto can best support the region. In some regions, community representatives have requested that Monsanto host town hall listening sessions or visit neighbors one on one through door-to-door contact.

As part of this assessment process, we identified best practices that many of our facilities had already implemented, such as safety training, initiating community health programs and engaging with many of their community members - from those representing education

and religion, to police and personal safety and environmental conservation.

Moving forward, several regions have incorporated community engagement roles within their facilities with the hopes of building even more meaningful relationships within the communities surrounding our plants.

The Monsanto Fund

As the philanthropic arm of our company, the Monsanto Fund, a U.S.-based 501(c)(3) nonprofit funded by Monsanto, seeks to make a positive sustainable difference in the communities where we live and work around the world, with an emphasis on farming communities. We collaborate locally to prioritize the most pressing issues and implement lasting solutions.

As part of Monsanto's commitment to inclusion and diversity, the Fund maintains a non-discrimination policy. In 2015, the Fund determined that the non-discrimination policy would apply to all donations in the United States. Previously, the nondiscrimination policy had applied only to donations made directly by the Fund. Now, the same non-discrimination policy will be



applied to the Monsanto Fund Matching Gifts Program, the America's Farmers Grow Communities grant program, and any other donations by the Fund regardless of whether the Fund selects the donations or if donations are selected by others.

Going forward, Monsanto Company will apply similar standards to the Monsanto Together volunteer grant program and other similar initiatives. All giving through corporate and local cost center budgets will require compliance with the standards of the non-discrimination policy.



ADDRESSING CRITICAL ISSUES

At Monsanto, we are dedicated to facing the tough issues head-on. Through our many stakeholder engagements, the development of our materiality assessment and the monitoring of what's being said about the company in the media, we have developed an understanding of what society and key stakeholders want to know about Monsanto and its products and business practices.

Stewarding Product Safety

Monsanto is firmly committed to ensuring that our products and technologies are safe and environmentally responsible. Our dedication to product stewardship encompasses responsible management of technologies and products across our seed, traits and crop protection businesses from concept to discontinuation.

Product stewardship efforts at Monsanto are supported by the industry wide Excellence Through Stewardship (ETS) initiative. This program includes third-party auditing of members' biotechnology stewardship policies and practices, including ours. By



2017, we expect that all of our operations globally for biotechnology-derived plant products will be ETS-certified. We engage in product stewardship initiatives through organizations including the American Seed Trade Association, CropLife International, EuropaBio, and the International Seed Federation.

Biotech and crop protection products are some of the most studied products in the world. Before any of these products ever reach the market, they undergo an extensive and thorough process to ensure their safety and effectiveness. This starts in our own labs and facilities and ultimately involves years of review by multiple regulatory agencies. Some of the internal product stewardship processes we have in place are outlined on the following page.



ENSURING PROPER USE OF TECHNOLOGIES

Monsanto produces an annual Technology Use Guide (TUG) for more than 360,000 farmers, retailers and other stakeholders. The TUG communicates important information regarding the appropriate and responsible use of Monsanto's seed and trait technologies, covering a wide range of topics including product stewardship, insect resistance management, integrated pest management, weed management and coexistence. It explains Monsanto's technologies, how to use them and how to ensure regulatory compliance.



LCStAMP. Our seed and crop protection products are subject to our Life Cycle Stewardship Activities Management Process (LCStAMP) to ensure their safety and integrity from gene discovery and plant development through seed production, marketing, distribution and discontinuation. In 2015, 20 product and technology stewardship reviews were completed.

Field Trials. Field trials are an important component of the development of all new seed varieties. Testing GMO products in regulated field trials is vital to develop important scientific information, assess the performance of a new trait and generate the necessary environmental safety data required by regulatory authorities that evaluate commercial product approvals. Monsanto implements field trial procedures that go beyond what is required to achieve the highest level of compliance and identify ongoing process improvements. We have embraced preventive auditing and self-reporting to encourage employees and cooperators to identify and immediately report potential incidents.

Trait Quality Program. Monsanto's Trait Quality Program focuses on delivering the intended biotech trait at each phase of

development and commercialization and is managed through rigorous internal policies, procedures, training and audits. The Trait Quality Program aims to ensure that our customers experience consistent product performance globally with maximum benefit.

In 2015, a total of 488 corporate audits across all functions were performed to assess field trial compliance and trait quality with 96 percent closed satisfactorily and the remaining 4 percent on track to be resolved through corrective action. While we believe that our compliance program is among the most comprehensive and successful compliance programs in the industry, we continually review and strengthen our practices.

Product Development. For a biotech seed product, the research and development process takes about 13 years and \$136 million, with more than a quarter of that cost incurred as part of the regulatory testing and approval process. In fact, the longest phase of biotech product development occurs during regulatory science and registration activities, which take more than five years. The research and development process for a new crop protection product



HANDLING PESTICIDE WASTE

Monsanto participates in industry-led container management and disposal projects around the world, and in the CropLife International Obsolete Stocks project, which addresses pesticide waste in Africa.

We also create our own initiatives when we identify an unfulfilled need, like we found in Indonesia. All of our crop protection product packaging contains guidelines for proper disposal of the containers after use. However, for some farmers, leaving spent pesticide containers in the field is still a common practice. As part of our commitment to product stewardship, Monsanto initiated pesticide waste collection programs. For instance, in the first year of this effort in Indonesia, the program led to the proper recycling and disposal of over 1,100 containers. This initiative helps to ensure unneeded pesticide doesn't end up in the land or waterways. The program is also intended to further educate growers about the importance of proper waste disposal.

takes about the same amount of time and can cost more than \$250 million. The process to gain approval for these types of products includes rigorous regulatory reviews to ensure product safety and determine effective stewardship plans. For an overview of the regulatory oversight during these complex development processes, see the diagram on the following page.



REGULATORY STEPS FOR DEVELOPING BIOTECH AND CROP PROTECTION PRODUCTS



Test for safety and effectiveness Identify one pesticide compound or biotech trait with commercial potential

> Test for allergens and toxicity (biotech seeds) Not required, but Monsanto internal process

> > Generate safety data from multiple sources

Submit to multiple regulatory agencies

Address regulatory agencies' questions

Ongoing research and product monitoring

Prepare technology use guides and labeling/packaging

Re-register after defined period and provide additional safety data, as applicable

Cooperate with others on product discontinuation

Driving Transparency in Academic Partnerships

Like many companies, Monsanto collaborates with university professors. A professor may be the world's leading expert in a particular field, and we need their insight to help us address a tough problem or to verify our own work. Sometimes we want an outside perspective on a product or idea on which we are working. No matter what the reason, these partnerships play an important role in our research and often produce outcomes that benefit society. Many products we use every day are the result of multi-stakeholder partnerships.

Acknowledging critical media coverage concerning corporations paying academics for consulting work, we've made a stronger effort to describe our working relationships with academics to the public through our own Beyond the Rows blog and through quest posts in third-party publications like Forbes. Like many companies, we sometimes fund a professor's research program or help them carry out public education and outreach, but Monsanto doesn't offer professors direct compensation. This is not unusual. Scientific research at universities is very often funded by outside sources, including companies, foundations and the government.

HOW WE COLLABORATE WITH ACADEMICS AND UNIVERSITIES



Exchange information through academic and industry conferences



Product testing for review by regulatory agencies



Invite academics to conduct field trials on our products



Seek advice on the safety and performance of our products



Co-author peer-reviewed research in academic journals



Recruit the best and brightest to work in agriculture



Provide information and resources to the general public



Advise decision makers on sound agricultural policy

The bottom line is that we don't have all of the answers or expertise. We rely on our academic partnerships to help us bring the best products and services to our customers.

Protecting Intellectual Property

Patents are an important part of how we can continue to fund research and bring new

products to market. In the United States, the right of inventors to obtain patents on their inventions was viewed as so important that it was provided for in the U.S. Constitution. The patent laws are designed to create an incentive to develop new and useful inventions. This is done by granting the inventor a limited-time right to own his or her invention in exchange for the invention being publicly described in such a way that others can make and use it once the patent expires.



Like many companies, Monsanto has patents on the inventions that we create. We put these inventions into our products and services in order to bring new options and products to farmers.

Many businesses, including Monsanto, have formal agreements with customers to ensure the best possible outcome for everyone. When farmers choose to purchase patented seeds we produce, they agree by contract not to save seeds from the crop produced at the end of the season. Almost all of our customers stick to their agreements, and they want us to make sure others are doing the same - otherwise, it's not a level playing field for them.

Unfortunately, a very small number of our customers don't abide by their agreements. For instance, they might save seeds from crops grown from the seeds they purchase from us. Not only does this violate their customer agreement, but these second-generation seeds are less effective because they may not offer the same benefits as the first generation.

Very rarely, these situations end up in court. This is always a last resort for us and has affected a tiny percentage of our customers. On the rare occasion that these situations go to trial, we give the remainder of proceeds collected from a judgment, after our costs are covered, to nonprofit youth leadership initiatives, so that the money is returned to the farming community. That's also true with any out-of-court settlement.

Through the continuous innovative cycle fueled in part by patents, we're able to continue our work developing the next generation of new products to be used by farmers to ensure we can feed the world's growing population for the long term.

Supporting the Science on Glyphosate

In March 2015, the International Agency for Research on Cancer (IARC) evaluated the potential carcinogenicity of several pesticides, including glyphosate, an active ingredient in many popular herbicides, including Monsanto's Roundup[®] family of herbicides. After the one week review, the IARC panel classified glyphosate as a Category 2A hazard ("probably carcinogenic to humans"), a category in which IARC recently included red meat.

Based on the overwhelming weight of evidence, key regulatory agencies, as well as Monsanto, disagreed with IARC's classification of glyphosate.

Importantly, IARC overlooked decades of thorough and science-based analysis by regulatory agencies around the world and selectively interpreted data to arrive at its classification of glyphosate. No regulatory agency in the world considers glyphosate to be a carcinogen.



Regulatory agencies have reviewed all the key studies examined by IARC – as well as many more studies – and arrived at the overwhelming consensus that glyphosate poses no unreasonable risks to humans or the environment when used according to label instructions.

Most recently, the <u>European Food Safety Authority</u> (EFSA) announced its conclusions that "glyphosate is unlikely to pose a carcinogenic hazard to humans and the evidence does not support classification with regard to its carcinogenic potential." EFSA's conclusion builds upon the science-based proposed re-evaluation decision by the Canadian Pest Management Regulatory Agency from April 2015, which concluded that "the overall weight of evidence indicates that glyphosate is unlikely to pose a human cancer risk."



To better understand how IARC arrived at such an inconsistent conclusion. Monsanto asked a panel of 16 experts to review IARC's assessment. The panel evaluated IARC's process and also examined the larger data set evaluated by regulatory agencies. They concluded "none of the results from a very large database, using different methodologies, provides evidence of, or a potential mechanism for, human carcinogenesis."

Pursuing Effective Regulatory Approval

This content is adapted from an interview by Bloomberg BNA with Dr. Phil Miller, Monsanto's Vice President, Global Government and Regulatory Affairs.

What Monsanto looks for in regulations is effectiveness, predictability and robustness. That's what gives consumers confidence in the decisions that are made by regulators. Monsanto has had biotech products that have been well studied and understood for more than 20 years. There's not been a single incident of any health or environmental risk associated with biotech products.

Both the agriculture industry and regulatory bodies could be more effective at helping

consumers understand the way regulators do their assessments. There's a significant gap in people's knowledge about science, safety and the benefits of all the agriculture technologies that are used, whether it's chemistry or biotech.

From a business perspective, it's also crucial that regulatory systems are funded appropriately so they can conduct their thorough assessments in a timely fashion. In Monsanto's case, our product introduction cycles are seasonal. We get an opportunity to introduce a new innovation to farmers only once a year. Timing is critical. If we receive required approvals late, farmers may have to wait another whole year to get the opportunity to leverage that innovation.

As consumers ourselves, the safety of our products is paramount to each of us who works at Monsanto. Our company is built on a foundation of science.

Dr. Phil Miller Vice President, Global Government and Regulatory Affairs

Summarizing Our View on Food Labeling

Consumers are increasingly interested in agriculture and in understanding how food is produced. As a company involved in one of the first steps of food production, we are one of many stakeholders involved in the dialogue about labeling.

Food production starts with a seed, and this is where much of Monsanto's business is focused. We produce a wide variety of seeds, including conventional and biotech or genetically modified organism (GMO) seeds for all types and sizes of farms around the world.

As an agricultural company, we serve our farmer customers, who grow high-quality crops that contribute to a safe, healthful and sustainable food supply. We believe farmers and consumers should have a broad range of product choices in the marketplace.

On the topic of food labeling, we believe:

The safety of our products is our first priority, and multiple health societies, hundreds of independent scientific experts and dozens of governments around the world have determined that foods and ingredients developed through biotechnology (or genetic modification [GM]) are safe.



- Each country establishes its own food labeling laws. Within the United States, the Food and Drug Administration (FDA) has established clear guidance for the voluntary labeling of food products containing ingredients derived from genetic modification; we support this approach.
- We also support food companies' choices to voluntarily label food products noting certain attributes (e.g. organic) based on their customers' preferences and provided the labeling is truthful and not misleading.
- We support a federal approach to food labeling. A uniform, national standard is needed to provide consumers accurate and consistent information about their food, without implying that ingredients derived from GM crops are less nutritious or less safe. This approach would eliminate confusion and address the uncertainty that would be created by a patchwork of state-by-state GMO food labeling laws.

See our website for more information and to watch a brief, informative video on this topic.

Succeeding in a **Competitive Environment**

In industries driven by innovation and technology - like agriculture - businesses must constantly

strive to remain competitive. That requires offering customers the solutions they want and need at prices they can afford, while still earning a profit for the company. And it takes policies that support market success and fair competition.

Critics of large businesses assert that such competitive practices have an almost opposite effect. Many of them believe that the leading agriculture companies, including Monsanto, have too much influence over the market and with policymakers, resulting in fewer choices and higher prices.

Our business has grown tremendously over the years, and we understand that the scale of this success brings scrutiny. Our growth can be attributed to many factors including an early investment in biotechnology, adding new approaches to historic breeding practices, and a decision to broadly license the results of those investments, including to our direct competitors, both large and small.

The reality is that agriculture remains a highly competitive industry. In fact, competition in the seeds sector has intensified. Monsanto competes with numerous large multinational seed companies globally and with hundreds of smaller companies regionally. Competition for the discovery of new traits based on biotechnology or genomics can

come from major global agrichemical companies, smaller biotechnology research companies and institutions, state-funded programs and academic institutions. In certain countries, we also compete with government-owned seed companies.

With thousands of seed products, hundreds of companies and brands, dozens of traits and enormous plant genetic variations, row crop and vegetable farmers have a wide range of solutions, products and price points from which to choose.

Of course, there are farmers whose access to even basic agronomic resources is significantly compromised, especially in developing nations. This presents a real challenge to food security around the globe as many of these farmers struggle to feed their own families, let alone sell their crops to earn income. We recognize this, and we're working in collaboration with farmers, NGOs, governments, banks and other organizations to help address this problem. We're helping to bring new technologies and resources to farmers in Africa and Asia and establish functioning markets, infrastructure and distribution mechanisms. For more information on these efforts, see the Food and Nutrition Security section of this report, starting on Page 27.



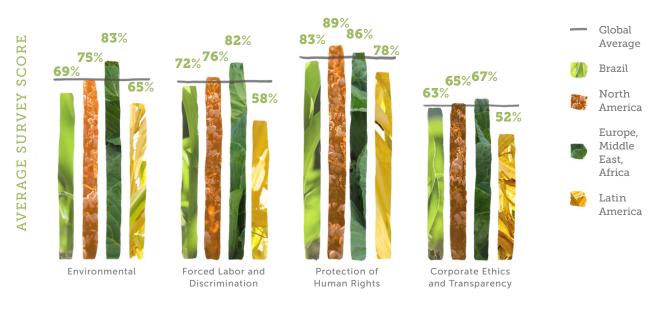
WORKING WITH OUR SUPPLY CHAIN

Monsanto relies on a vast network of suppliers across 19 primary categories including services, equipment and raw materials, and our network of seed production partners. Procurement is committed to supporting a farmer's ability to improve harvests while using fewer resources and improve lives by supporting purchasing approaches that promote environmental, ethical and social principles.

Our Supplier Code of Conduct extends the commitments found in our Code of Business Conduct to suppliers worldwide. All current and new suppliers invited to engage in business with Monsanto must complete a computer-based profile that covers a range of sustainability topics including ethics, environment, labor, human rights and other social issues. Monsanto requires its suppliers to accept the importance of their conformance with the Supplier Code through the establishment of new contracts and at the time of contract renewal. The Global Procurement section of our website provides prospective and existing suppliers easy access to information about what is expected of them, including access to the Supplier Code of Conduct in 29 languages.



AVERAGE SUPPLIER SUSTAINABILITY SURVEY SCORE BY CATEGORY BY REGION - 2015



The chart shows the average scores of participating suppliers across categories by geographic region compared to the Global Average. Geographic regions that had five or more suppliers participate in the survey are included in this graph.



In 2013, Monsanto Global Procurement formed a Global Procurement Sustainability Network, led by representatives from each business region and developed a comprehensive five-year plan for addressing sustainability within our supplier base. One outcome of this plan is a standardized sustainability risk assessment process that can be applied to our strategic suppliers.

This process, launched in late 2014 and completed in 2015, weighed the economic, environmental and social profiles and behaviors of key suppliers in order to evaluate these relationships and their contributions and risks related to Monsanto's sustainability goals. Suppliers representing \$959.5 million or 12 percent of our global annual procurement spend completed the first assessment in 2015. Monsanto uses these comprehensive supplier performance profiles to enhance supplier relationship management efforts, assess opportunities and risks, and develop supplier specific plans that incorporate best practices.

Excelling in Trade Compliance

Monsanto is committed to compliance with all U.S. export and applicable non-U.S. export laws and regulations that govern the transportation of our products across international borders. We are certified under several voluntary trade compliance programs, like Customs-Trade

Partnership Against Terrorism (C-TPAT) and the Importer Self-Assessment (ISA) program. C-TPAT establishes measures to add security to trade in order to safeguard the world's industry from terrorists, and the ISA program is an initiative of the U.S. Customs and Border Protection that partners with importers who can demonstrate their readiness to manage and monitor their trade compliance through self-assessment.

Protecting Our Guests

Monsanto's Contractor Guest Program has worked for decades to provide a safe work environment for everyone who works at or visits our facilities. This program applies to all of our suppliers who work in our facilities and campuses around the globe. The Contractor Guest Program is a formal system that identifies potential risks for our suppliers who work onsite. It provides targeted safety guidelines to our suppliers based on these risks in order to ensure proper safety oversight and safety auditing and most importantly, personal safety. The program also includes a formal pregualification process for suppliers operating at site-specific, regional and global levels to ensure that we maintain the safety of our workers and suppliers.

We aspire to an injury-free and incidentfree work environment at all of our sites. which is why it's necessary to promote

continuous improvement in our Contractor Guest Program Environmental Safety and Health (ESH) performance standards. By consistently excelling in this program, we not only provide a safe working environment, but also add value to our supplier companies, our employees and the communities in which we operate. Our on-site suppliers in return gain the added value of a safer workforce.

Supporting Diverse Businesses

Monsanto is committed to promoting the growth of our minority-owned suppliers, and we collaborate with diverse businesses around the world to create a strong and resilient network of suppliers.

Our Supplier Diversity Mentorship Program is just one example. In 2015, we held the first, highly recognized and publicized Monsanto Supplier Diversity Mentorship Program in the United States, designed to mentor diverse U.S.-based businesses that may or may not have supplier contracts with us. We offered consultation on various business topics and best practices to help them build their own capacity, as well as outlined how attendees can engage with Monsanto to become part of our supplier network. Plans are in place to expand this effort in the United States and in select global regions.



REPORTING OUR PROGRESS

This report does more than simply relay our commitment to sustainability. It highlights our challenges and opportunities. It sparks conversations that help us more acutely understand what matters to our company and shareowners, farmers, policymakers, communities and consumers. Those insights guide the content of this report, as well as inform where we may focus our future efforts. For us, sustainability reporting is a communications, engagement and strategic management tool.

Each year, we publish a sustainability report and a United Nations Global Compact Communication on Progress. This report is prepared in accordance with the Global Reporting Initiative (GRI) G4 voluntary Sustainability Reporting Guidelines "Core" option and incorporates many aspects of the "Comprehensive" option. For the first time, we are also reporting on how our efforts align with the United Nations Sustainable Development Goals, adopted in September 2015.

Gathering Stakeholders' Perspectives

We seek a broad range of perspectives to learn more about what's important to all of



the people and organizations touched by our business. This year, we worked with BSR, a global nonprofit business network and sustainability consultancy, to conduct a formal materiality assessment that engaged many internal and external stakeholders. Our approach is an evolution from our first assessment completed in 2012 and builds on the updates we've made in recent years.

Together with BSR, we explored a broad list of issues and topics that could potentially impact the success of our business and might be important to external stakeholders. This list was generated from our collective industry and sustainability knowledge, as well as the topics from our 2012 materiality assessment. We grouped these issues into five categories: employees, environment, governance, responsible products and society.

DRAWING BOUNDARIES

The scope of information covered in this report varies based on the type of content provided. Footnotes to data tables designate the scope and reporting period covered by the applicable data. Unless otherwise noted, the information pertains to our global Seed and Traits and Crop Protection segments and corporate functions including consolidated subsidiaries, but excluding joint ventures. Environmental, health and safety data and human rights data are based on fiscal year 2015, which ran from September 1, 2014, to August 31, 2015. We do not distinguish between fiscal and calendar years for anecdotal information, and as a result, some information may be noted from other calendar years.

Locations referenced throughout this report without a country name are within the United States.



BSR interviewed 30 Monsanto employees from different areas of our business around the world and 20 external stakeholders. They spoke with representatives from NGOs, academia, research institutions, public health organizations, government, the food industry, consumers, community neighbors and our farmer customers.

A scoring system was applied to the results of these interviews, which enabled us to plot the issues on a matrix that visually represents where each topic falls relative to its importance to our company and our stakeholders. With the matrix developed, BSR hosted an in-person workshop and virtual review sessions to gather feedback from key Monsanto leaders and identify any needed adjustments.

A materiality assessment is part science and part art, requiring both subjective and objective inputs. Through this process, we found that the position of some issues on the materiality matrix have shifted since our 2012 assessment. These changes can be attributed to using a new materiality process, shifting business and stakeholder priorities and perspectives, and the evolving conditions of our planet and society.

MATERIAL ISSUES MATRIX



Note: Issues that appear in the lower third segment of the Material Issues Matrix are not included in the tables in this report.



Where Impacts Occur

A key principle of the GRI G4 Guidelines is to determine and report where a company's material issues impact the business, key stakeholders and society at large. An impact can be positive or negative. The tables on the following pages summarize the issues that both external stakeholders and Monsanto business regions identified as most important. We also indicate where we believe these impacts occur relative to our business, suppliers, farmers and consumers.

Mapping External Stakeholder Views on Material Sustainability Issues

The table at the right maps the most important sustainability issues and topics for Monsanto from an external stakeholder perspective. The green circles indicate that the particular stakeholder viewed the material issue as high in importance.

Issue	FOOD/GRAIN INDUSTRY	NGOs	FARMERS	ACADEMIA	GOVERNMENT
Product Safety and Stewardship	•		•		
Innovative Technologies and Products	•	•	•	•	•
Climate Change Mitigation and Adaptation	•	•	•	•	•
Sustainable Chemistry			•		•
Water Consumption and Management					
Business Practices and Competition					
Global Hunger and Nutrition Security		•	•	•	•
Business Ethics and Transparency					•
Positive Relationships with Local Communities and Society		•	•		•
Regulatory Approval Systems					•
Serving Smallholder Farmers			•		•
Land Use and Deforestation			•	•	•
Soil Health		•	•	•	•
Human Rights				•	
Seed Patents and Plant Variety Rights		•	•	•	•
Talent Management, Diversity and Benefits					
GMO Labeling	•	•	•	•	•
Biodiversity and Ecosystems				•	•
Occupational Health, Safety and Wellness	•	•			•
Data Management and Access		•	•		
Political Spending		•	•		•



Mapping Monsanto Views on Material Sustainability Issues by Regions of the World

The table at the right maps the most important sustainability issues and topics for Monsanto from an internal perspective for each region of the world in which we operate, as indicated by the green circles.

Issue	SOUTH AMERICA	NORTH AMERICA (U.S., Canada, Mexico)	ASIA/ AFRICA	EUROPE
Product Safety and Stewardship		•		•
Innovative Technologies and Products	•	•		
Climate Change Mitigation and Adaptation		•		
Sustainable Chemistry		•		•
Water Consumption and Management		•		
Business Practices and Competition		•		
Global Hunger and Nutrition Security		•		•
Business Ethics and Transparency		•		•
Positive Relationships with Local Communities and Society		•		•
Regulatory Approval Systems				
Serving Smallholder Farmers				
Land Use and Deforestation				
Soil Health		•		
Human Rights				
Seed Patents and Plant Variety Rights		•		
Talent Management, Diversity and Benefits		•		
GMO Labeling		•		
Biodiversity and Ecosystems		•		•
Occupational Health, Safety and Wellness				
Data Management and Access		•		•
Political Spending		•		



Mapping Where Sustainability **Impacts Occur**

The table at the right maps where impacts occur along Monsanto's business value chain, as indicated by the green circles.

Issue	MONSANTO	SUPPLIERS	FARMERS	CONSUMERS
Product Safety and Stewardship			•	
Innovative Technologies and Products		•		
Climate Change Mitigation and Adaptation		•	•	
Sustainable Chemistry			•	
Water Consumption and Management		•	•	
Business Practices and Competition				
Global Hunger and Nutrition Security			•	
Business Ethics and Transparency		•		•
Positive Relationships with Local Communities and Society			•	
Regulatory Approval Systems				
Serving Smallholder Farmers			•	
Land Use and Deforestation				
Soil Health		•		
Human Rights		•		
Seed Patents and Plant Variety Rights			•	
Talent Management, Diversity and Benefits				
GMO Labeling				
Biodiversity and Ecosystems			•	•
Occupational Health, Safety and Wellness		•		
Data Management and Access			•	
Political Spending			•	•



Index and Tables



GRI G4 Index

GENERAL STANDARD DISCLOSURES

GRI INDICATOR	LOCATION/DESCRIPTION
G4-1	CEO Letter, Page 3
G4-2	CEO Letter, Page 3; Executive Summary, Pages 4-7; We Are Monsanto, Pages 13-22 (Agricultural Innovation: Our Approach to Sustainability); Monsanto 2015 Form 10-K: Item 1, 1A, 7A

Organizational Profile

G4-3	Monsanto Company
G4-4	We Are Monsanto, Pages 9-12
G4-5	St. Louis, Missouri, United States
G4-6	We Are Monsanto, Page 10; Monsanto 2015 Form 10-K: Item 2, Note 25
G4-7	Certificate of Incorporation
G4-8	We Are Monsanto, Pages 9-12; Monsanto 2015 Form 10-K: Item 1, Note 25
G4-9	We Are Monsanto, Page 9; People, Pages 43-44 (Employee Composition Data); Monsanto 2015 Form 10-K: Item 1 (Employee Relations), Item 8
G4-10	People, Pages 43-44 (Employee Composition Data); Monsanto 2015 Form 10-K: Item 1 (Employee Relations), Item 8
G4-11	People, Page 48 (Forging the Way in Human Rights)
G4-12	Company, Pages 90-91 (Working with Our Supply Chain)
G4-13	People, Page 40 (End of Career Support); People, Pages 49-50 (Tracking Our Progress); Monsanto 2015 Form 10-K: Note 5
G4-14	Company, Pages 83-86 (Stewarding Product Safety)
G4-15 G4-16	We Are Monsanto, Page 22 (Working Collaboratively and Transparently)

Identified Material Aspects and Boundaries

G4-17	All entities included in our Consolidated Financial Statements are covered in this report. Monsanto 2015 Form 10-K: Exhibit 21
G4-18	Company, Pages 92-96 (Reporting Our Progress)
G4-19	We Are Monsanto, Pages 18-21



GENERAL STANDARD DISCLOSURES

GRI INDICATOR	LOCATION/DESCRIPTION
G4-20 G4-21	People, Pages 43-44 (Employee Composition Data), 47 (Health and Safety Data); Planet, Pages 72-76 (Environmental Data); Company, Pages 92-96 (Reporting Our Progress)
G4-22	Some 2014 environmental data was updated due to changes in calculations. See Planet, Page 73 (Environmental Data). The 2014 Total Recordable Rate (TRR) for our APAC region was listed incorrectly as zero, but the two sets of data that comprise TRR were reported correctly.
G4-23	Report scope and aspect boundaries remain the same as 2014.

Stakeholder Engagement

G4-24	We Are Monsanto, Page 22 (Working Collaboratively and Transparently); Company, Page 79 (Our Corporate Governance Framework), 92-96 (Reporting Our Progress)
G4-25 G4-26	We Are Monsanto, Page 22 (Working Collaboratively and Transparently); Company, Pages 92-96 (Reporting Our Progress)
G4-27	We Are Monsanto, Page 23 (Inviting Conversation); Company, Pages 92-96 (Reporting Our Progress); Also discussed throughout this report.

Report Profile

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G4-28	Fiscal year 2015; See also Page 92 (Drawing Boundaries)
G4-29	Fiscal Year 2014
G4-30	We plan to report on our sustainability commitments annually on a fiscal year basis.
G4-31	tami.j.craig.schilling@monsanto.com
G4-32 G4-33	This report was prepared in accordance with the GRI G4 "Core" option and contains many elements of the "Comprehensive" option. We have sought and received external assurance from Bureau Veritas for our key data-driven environmental indicators and for the section of the report entitled Working with Our Supply Chain. See Assurance Letters on Pages 111-116.

Governance

G4-34 G4-35 G4-36	We Are Monsanto, Page 14 (Governing and Managing Our Sustainability Commitment); Company, Pages 78-80 (Our Corporate Governance Framework); Website: Corporate Governance
G4-37	Company, Page 79 (Engaging with Shareowners)
G4-38	Company, Page 80 (Corporate Governance at a Glance); Website: Corporate Governance



GENERAL STANDARD DISCLOSURES

GRI INDICATOR	LOCATION/DESCRIPTION						
G4-39	2015 Proxy Statement, Page 25						
G4-40	2015 Proxy Statement, Page 23						
G4-41	2015 Proxy Statement, Pages 32-34						
G4-42	We Are Monsanto, Pages 13-14 (Agricultural Innovation: Our Approach to Sustainability); Company, Pages 78-80 (Our Corporate Governance Framework); Website: Corporate Governance						
G4-43	Company, Pages 78-80 (Our Corporate Governance Framework); 2015 Proxy Statement, Pages 27, 29						
G4-44	Company, Pages 78-80 (Our Corporate Governance Framework); 2015 Proxy Statement, Pages 27-28						
G4-45 G4-46	We Are Monsanto, Pages 13-14 (Agricultural Innovation: Our Approach to Sustainability); Company, Pages 78-80 (Our Corporate Governance Framework); 2015 Proxy Statement, Pages 29-31; Website: Corporate Governance						
G4-47	Company, Page 79 (Our Corporate Governance Framework); Website: Corporate Governance						
G4-48	The Board of Directors Sustainability and Corporate Responsibility Committee						
G4-49	Company, Page 79 (Our Corporate Governance Framework), 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business); 2015 Proxy Statement, Page 31						
G4-50	We have various ways of gathering concerns across company functions and regions of the world including: customer product inquiries, employee and contractor inquiries, consumer online contacts via monsanto.com, discover.monsanto.com, and world areas websites. Each concern has an established process and business owner for addressing the situation. Summary reports for each area flow to regional, functional or executive leaders.						
G4-51 G4-52 G4-53	2015 Proxy Statement, Pages 8-9, 36-40						

Ethics and Integrity

G4-56	Website: Code of Ethics; Website: Our Pledge
G4-57 G4-58	Company, Pages 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)



GRI INDICATOR LOCATION/DESCRIPTION

Aspect: Economic Performance

G4-EC1	Monsanto 2015 Form 10-K: Item 8
G4-EC2	Planet, Pages 52-57 (Mitigating and Adapting to Climate Change)
G4-EC3	Monsanto 2015 Form 10-K: Note 16

Aspect: Indirect Economic Impacts

G4-EC7	Monsanto supports a variety of infrastructure investments through its philanthropic arm, the Monsanto Fund, a U.Sbased 501(c)(3) nonprofit organization funded by Monsanto. For more information, see the Monsanto Fund Report.
G4-EC8	People, Pages 27-29 (Helping to Ensure Food and Nutrition Security), 29-30 (Grow Asia: Improving Farmer Livelihoods), 30-31 (Providing Information and Training to Smallholder Farmers), 34-35 (Staking the Future on STEM); Planet, Page 64 (Embracing Sustainable Landscapes)

Category: Environmental

G4-EN22

G4-EN9

Aspect: Energy/Greenhouse Gas Emissions

Aspect: Energy/Greenhouse Gas Emissions	
(All indicators highlighted in green are externally assured) G4-EN3 G4-EN4 G4-EN5 G4-EN15 G4-EN16 G4-EN17 G4-EN18 G4-EN21	Planet, Pages 73-75 (Environmental Data - Energy Use and Emissions)
G4-EN6 G4-EN19	(Partially reported) Planet, Pages 52-53 (Fighting Climate Change in Our Own Backyard)
G4-EN7	We Are Monsanto, Pages 11-12 (Our Products); Planet, Pages 52-57 (Mitigating and Adapting to Climate Change)
Aspect: Water	
(All indicators highlighted in green are externally assured) G4-EN8 G4-EN10	Planet, Pages 75-76 (Environmental Data - Water Use)

(Partially reported) Planet, Pages 58-60 (Ensuring Access to Fresh Water)



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	As	pect:	Biodive	rsity
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G4-EN11	We Are Monsanto, Page 25 (Larning Recognition); Planet, Page 60 (Protecting Sensitive Habitats). We continue analyzing our operations that are near or adjacent to areas of high biodiversity to ensure our operations do not affect sensitive habitat.
G4-EN12	(Partially reported) Planet, Pages 61-63 (Biodiversity: Preserving Sustainable Landscapes)
G4-EN13	Planet, Pages 65-71 (Biodiversity: Preserving Sustainable Landscapes)

Aspect: Effluents & Waste	
G4-EN23 G4-EN25	Planet, Page 76 (Environmental Data - Waste)
G4-EN24 (externally assured)	In fiscal year 2015 there were no accidental, episodic spills or releases from our facilities that were significant enough to be reported to one or more governmental agencies.
G4-EN26	Across the globe, Monsanto complies with a diverse set of regulatory programs designed to protect water bodies and related habitats and routinely audits against these requirements. Beyond these audits, Monsanto regularly performs self-assessments of all of our chemical manufacturing operations to confirm that we are not causing adverse impacts to groundwater or neighboring water resources. See also: Planet, Pages 58-60 (Ensuring Access to Fresh Water)

Aspect: Products & Services

G4-EN27	Planet, Pages 51-71
G4-EN28	Monsanto partners in agricultural container recycling programs globally, but does not currently collect this information centrally. In 2015, we estimate that approximately 92 percent of our U.S. crop protection product packaging was either refillable or recycled. With more than 85 percent of our products sold in refillable containers and the other 15 percent in single-use plastic jugs, as part of the Ag Container Recycling

Aspect: Compliance

P4 Production, L.L.C., a wholly owned subsidiary of Monsanto Company, reached an agreement with the U.S. Environmental Protection
Agency (EPA) to resolve a dispute regarding the methodology for calculating, quantifying and reporting air emissions from the company's
phosphate ore processing plant in Soda Springs, Idaho. Under the terms of the agreement, P4 paid a civil penalty of \$600,000. The dispute
focused strictly on reporting quantities and methods. There was no allegation of an exceedance of Idaho Air Toxics Standards or National
Ambient Air Quality Standards or contribution to any known air-quality related health concerns in the Soda Springs air shed. Monsanto
regularly and routinely collects compliance information regarding its global operations. We did not identify any other material fines or
nonmonetary sanctions for noncompliance with environmental laws and regulations. See also: Monsanto 2015 Form 10-K: Item 3, Note 24

Council (ACRC) initiative, we are diligently working to reduce product packaging waste. See also: Planet, Page 84 (Handling Pesticide Waste).

Aspect: Transport

G4-EN29 (externally assured)

Hopeet. Hanoport	
G4-EN30	Planet, Pages 73-75 (Environmental Data - Energy Use and Emissions)



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GRI INDICATOR	LOCATION/DESCRIPTION
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As			

G4-EN31	(Partially reported) Planet, Page 52 (Investing in Operational Greenhouse Gas Reductions)

Aspect: Supplier Environmental Assessment

G4-EN32		
G4-EN33	Company, Pages 90-91 (Working with Our Supply Chain)	

Aspect: Environmental Grievance Mechanisms

	We do not have a single formal mechanism in place to respond to all grievances Monsanto might receive regarding environmental
G4-EN34	issues. Rather, we respond on a case-by-case basis, working with relevant company functions and involving upper-level management
	as appropriate. Typically, this work involves our Environmental, Safety and Health organization or our Regulatory organization.

Category: Social

Subcategory: Labor Practices and Decent Work

Aspect: Employment

G4-LA1	People, Pages 43-44 (Employee Composition Data)
G4-LA2	People, Pages 41-42 (Rewarding Great Work)
G4-LA3	People, Page 44 (Employee Composition Data)

Aspect: Labor/Management Relations

	(Partially reported) We comply with the notification periods required in the regions of the world where we work. When an area has no specified
G4-LA4	notification policy, we build our communication timeline in a way that accounts for the needs of our employees and their circumstances.
	Where collective bargaining agreements are in place, Monsanto follows the notification guidelines established in these agreements.

Aspect: Occupational Health & Safety

G4-LA5	People, Page 45 (Promoting Employee Health, Safety and Well-Being)
G4-LA6	People, Page 47 (Tracking Health and Safety Performance). Note: We do not track absentee rates. In fiscal year 2015 there were no work-related fatalities.
G4-LA7	People, Page 46 (Promoting Employee Health, Safety and Well-Being/Preventing Occupational Diseases)

Aspect: Training & Education

G4-LA11

G4-LA9	People, Pages 38-40 (Developing Our Employees); Our tracking methodology for employee training hours was revised in fiscal year 2015.
G4-LA10	People, Pages 38-40 (Developing Our Employees)

Aspect: Freedom of Association and Collective Bargaining

LOCATION/DESCRIPTION

People, Pages 48-50 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain)

People, Pages 49-50 (Forging the Way in Human Rights), 50 (Helping Eradicate Child Labor);

People, Pages 49-50 (Tracking Our Progress); Company, Pages 90-91 (Working with Our Supply Chain)



GRI INDICATOR

G4-HR4

G4-HR5

G4-HR6

G4-HR7

G4-HR8

Aspect: Child Labor

Aspect: Security Practices

Aspect: Indigenous Rights

Aspect: Forced or Compulsory Labor

Aspect: Diversity & Equal Opportunity	
G4-LA12	People, Pages 43-44 (Employee Composition Data); Company, Page 80 (Corporate Governance at a Glance)
Aspect: Supplier Assessment for Labor Practices	
G4-LA14	Company, Pages 90-91 (Working with Our Supply Chain)
G4-LA15	People, Pages 49-50 (Tracking Our Progress); Company, Pages 90-91 (Working with Our Supply Chain)
Aspect: Labor Practices Grievance Mechanisms	
G4-LA16	Company, Pages 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)
Subcategory: Human Rights	
Aspect: Investment	
G4-HR1	People, Page 48 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain)
G4-HR2	People, Page 48 (Forging the Way in Human Rights)
Aspect: Non-discrimination	
G4-HR3	Company, Page 80 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)

Company, Pages 90-91 (Working with Our Supply Chain)

People, Page 48 (Forging the Way in Human Rights)

People, Pages 49-50 (Tracking Our Progress)

Monsanto 2015 Sustainahili	ity Report
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GRI INDICATOR LOCATION/DESCRIPTION

Aspect: Assessment

G4-HR9 People, Pages 48-50 (Forging the Way in Human Rights)

Aspect: Supplier Human Rights Assessment

G4-HR10 Company, Pages 90-91 (Working with Our Supply Chain)

G4-HR11 People, Pages 48-50 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain)

Aspect: Human Rights Grievance Mechanisms

G4-HR12 Company, Pages 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)

Subcategory: Society Aspect: Local Communities

G4-SO1 Company, Pages 81-82 (Engaging with Our Neighbors)

> (Partially reported) Monsanto locations include administrative and sales offices, manufacturing plants, seed production facilities, research centers and learning centers located in mainly rural communities around the world. Information about specific operations is not reported due to security reasons. We employ a variety of measures to keep employees, visitors and communities safe including process safety management, pollution prevention, community awareness and emergency response planning.

While Monsanto manages the following areas to mitigate and minimize the local impact of its operations on local communities and neighbors, each site type deals with a different set of potential community impacts.

- All sites have the potential to affect a community via fire, traffic, waste disposal and water consumption.
- Seed production, crop protection and research operations could impact a community through air emissions, noise, hazardous material release, light pollution and more.

Qualified audit teams conduct oversight compliance audits with attention to environmental, industrial hygiene, safety and property protection and occupational medicine at each Monsanto facility on a rotation with staff responsible for ongoing management of environmental, health and safety conditions.

All of our sites have off-site consequence analysis for all highly hazardous materials (HHM) handled, including all credible scenarios (wind directions, etc.) to ensure proper community notification systems exist as needed; plant emergency response is sufficient; and drills with local authorities. Our global Crop Protection chemical production sites follow local Responsible Care programs and have externally validated environmental (ISO 14001 or RC14001®) management systems in place.

See also: Planet, Page 72 (Guiding and Auditing Our Environmental Performance)

G4-SO2



SPECIFIC STANDARD DISCLOSURES	
GRI INDICATOR	LOCATION/DESCRIPTION
Aspect: Anti-corruption	
G4-SO3	(Partially reported) Company, Pages 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)
GR-SO4	Company, Pages 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)
Aspect: Public Policy	
G4-SO6	Company, Page 81 (Political Contributions); Website: Political Disclosures
Aspect: Anti-competitive Behavior	
G4-SO7	Monsanto 2015 Form 10-K, Note 24
Aspect: Compliance	
G4-SO8	Monsanto regularly and routinely collects compliance information regarding its global operations. We did not identify any material fines or nonmonetary sanctions for noncompliance with laws and regulations, other than the penalties noted in G4-EN29 and G4-PR9. See also: Monsanto 2015 Form 10-K: Item 3, Note 24
Aspect: Supplier Assessment for Impacts on Society	
G4-SO9	Company, Pages 90-91 (Working with Our Supply Chain)
G4-SO10	People, Pages 48-50 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain)
Aspect: Grievance Mechanisms for Impacts on Society	
G4-SO11	We do not have a single formal mechanism in place to respond to all grievances Monsanto might receive regarding impacts on society. Rather, we respond to grievances on a case-by-case basis, working with relevant company functions and involving upper-level management as appropriate. We address general concerns, for example those regarding our history, business and product lines, through various outreach programs, including our website and social media. We address more local concerns with outreach by our local and regional management and relevant personnel.
Subcategory: Product Responsibility Aspect: Customer Health and Safety	
	Company, Pages 83-85 (Stewarding Product Safety), 87-88 (Supporting the Science on Glyphosate);
G4-PR1	Website: Product Stewardship; Website: Safety and Technical Information
G4-PR2	Monsanto regularly and routinely collects compliance information regarding its global operations. We did not identify any material incidents of noncompliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle. See also: Monsanto 2015 Form 10-K: Item 3, Note 24



GRI INDICATOR	LOCATION/DESCRIPTION
Aspect: Product and Services Labeling	
G4-PR3	 Sourcing of components of the product or service: no Content, particularly with regard to substances that might produce an environmental or social impact: yes Safe use of the product: yes Disposal of the product and environmental/social impacts: yes
	Our crop and vegetable seeds and crop protection products are covered by and assessed for compliance with the procedures identified above.
G4-PR4	Monsanto regularly and routinely collects compliance information regarding its global operations. We did not identify any material incidents of noncompliance with regulations and voluntary codes concerning product and service information and labeling. See also: Monsanto 2015 Form 10-K: Item 3, Note 24
G4-PR5	Based on a large survey of our farmer customers across a wide range of countries executed each year, both large and small acre farmers who raise row crops and vegetables report the following: high marks to our seed brand performance, strong satisfaction for biotech trait seed performance and a growing number respond that they would be willing to recommend Monsanto's products to a friend.
Aspect: Marketing Communications	
G4-PR6	We Are Monsanto, Page 22 (Working Collaboratively and Transparently), 23 (Inviting Conversation); Company, Pages 83-85 (Stewarding Product Safety), 87-88 (Supporting the Science on Glyphosate), 88-89 (Summarizing Our View on Food Labeling); Website: Safety and Technical Information; Website: Labeling Food and Ingredients Developed from GM Seed
G4-PR7	Monsanto regularly and routinely collects compliance information regarding its global operations. We did not identify any material incidents of noncompliance with regulations and voluntary codes concerning marketing communications. See also: Monsanto 2015 Form 10-K: Item 3, Note 24
Aspect: Customer Privacy	
G4-PR8	Monsanto did not experience breaches of customer privacy or loss of customer data in fiscal year 2015.
Aspect: Compliance	
G4-PR9	Under a settlement agreement, Monsanto paid a civil penalty of \$81,200 to resolve alleged violations of the United States Department of Agriculture Animal and Plant Health Inspection Service biotechnology regulations (7 CFR part 340). The investigation is now closed. We did not identify any other material fines for noncompliance with laws and regulations concerning the provision and use of products and services. See also: https://www.aphis.usda.gov/aphis/ourfocus/biotechnology/sa_compliance_and_inspections/ct_compliance_history



DISCLOSURES ON MANAGEMENT APPROACH OF MATERIAL ISSUES

WE ARE

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See Pages 18-21 for definitions of each material issue listed below.	LOCATION/DESCRIPTION
Product Safety & Stewardship	Planet, Pages 68-69 (Enabling Responsible Pest Control), 70-71 (Researching Natural Solutions for Plant Health and Pest Control); Company, Pages 83-85 (Stewarding Product Safety), 87-88 (Supporting the Science on Glyphosate), 88-89 (Summarizing Our View on Food Labeling)
Innovative Technologies and Products	We Are Monsanto, Pages 11-12 (Our Products); Planet, Pages 52-56 (Mitigating and Adapting to Climate Change), 57 (Applying Data Science to Feed a Growing Population), 68-69 (Enabling Responsible Pest Control), 70-71 (Researching Natural Solutions for Plant Health and Pest Control)
Climate Change Mitigation and Adaptation	Planet, Pages 52-57 (Mitigating and Adapting to Climate Change)
Sustainable Chemistry	Planet, Pages 68-69 (Enabling Responsible Pest Control), 70-71 (Researching Natural Solutions for Plant Health and Pest Control)
Water Consumption and Management	Planet, Pages 58-60 (Ensuring Access to Fresh Water)
Business Practices and Competition	Company, Page 86 (Driving Transparency in Academic Partnerships), 86-87 (Protecting Intellectual Property), 88 (Pursuing Effective Regulatory Approval), 89 (Succeeding in a Competitive Environment)
Global Hunger and Nutrition Security	People, Pages 27-33 (Helping to Ensure Food and Nutrition Security)
Business Ethics and Transparency	We Are Monsanto, Page 22 (Working Collaboratively and Transparently), 23 (Inviting Conversation); Company, Pages 78-80 (Our Corporate Governance Framework), 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business), 86 (Driving Transparency in Academic Partnerships)
Positive Relationships with Local Communities and Society	People, Pages 34-37 (Reaching Out to Communities); Company, Pages 81-82 (Engaging with Our Neighbors), 91 (Protecting Our Guests)
Regulatory Approval Systems	Company, Pages 83-85 (Stewarding Product Safety), 88 (Pursuing Effective Regulatory Approval)
Serving Smallholder Farmers	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security)
Land Use and Deforestation	Planet, Pages 61-63 (Making the Connection: Agriculture and Biodiversity), 64 (Embracing Sustainable Landscapes)
Soil Health	Planet, Page 65 (Exploring the Benefits of Healthy Soil), 66 (Digging Into Soil Health)
Human Rights	People, Pages 48-50 (Forging the Way in Human Rights)
Seed Patents and Plant Variety Rights	Company, Pages 86-87 (Protecting Intellectual Property)
Talent Management, Diversity and Benefits	People, Pages 38-42 (Improving Lives for Our People)
GMO Labeling	Company, Pages 88-89 (Summarizing Our View on Food Labeling); Website: Labeling Food and Ingredients Developed from GM Seed
Biodiversity and Ecosystems	Planet, Pages 61-71 (Biodiversity: Preserving Sustainable Landscapes)
Occupational Health, Safety and Wellness	People, Pages 45-47 (Promoting Employee Health, Safety and Well-Being)
Data Management and Access	The Climate Corporation Website: Guiding Principles on Data and Privacy
Political Spending	Company, Page 81 (Political Contributions); Website: Political Disclosures



UN Global Compact Index

THE TEN PRINCIPLES

PRINCIPLE LOCATION/DESCRIPTION

Human Rights

1	Businesses should support and respect the protection of internationally proclaimed human rights.	People, Pages 48-50 (Forging the Way in Human Rights)
	Businesses should make sure that they are	Deeple Dages 49 FO (Farging the Way in Llyman Dights); Company Dages 00 01 (Westing with Our Cumply Chain)

People, Pages 48-50 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain) not complicit in human rights abuses.

Labour

	Businesses should uphold the freedom of	
3	association and the effective recognition	People, Pages 48-50 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain)
	of the right to collective bargaining.	

- Businesses should uphold the elimination of People, Pages 48-50 (Forging the Way in Human Rights); Company, Pages 90-91 (Working with Our Supply Chain) all forms of forced and compulsory labour.
- Businesses should uphold the People, Pages 48-50 (Forging the Way in Human Rights), 50 (Helping Eradicate Child Labor); effective abolition of child labour. Company, Pages 90-91 (Working with Our Supply Chain)
- Businesses should uphold the elimination of People, Pages 40-41 (Embracing the Power of Inclusion and Diversity); Company, Page 80 (Corporate Governance at a Glance); discrimination in respect of employment and occupation. Company, Pages 90-91 (Working with Our Supply Chain)

Environment

Businesses should support a precautionary approach to environmental challenges.	Planet, Pages 52-57 (Mitigating and Adapting to Climate Change); Company, Pages 83-85 (Stewarding Product Safety)
Businesses should undertake initiatives to promote greater environmental responsibility.	Planet, Pages 52-57 (Mitigating and Adapting to Climate Change), 58-60 (Ensuring Access to Fresh Water), 61-71 (Biodiversity: Preserving Sustainable Landscapes), 72 (Guiding and Auditing Our Environmental Performance); Company, Pages 83-85 (Stewarding Product Safety)
Businesses should encourage the development and	We Are Monsanto, Pages 11-12 (Our Products): People, Pages 27-31 (Helping to Ensure Food and Nutrition Security):

Planet, Pages 52-57 (Mitigating and Adapting to Climate Change), 70-71 (Researching Natural Solutions for Plant Health and Pest Control)

Anti-corruption

diffusion of environmentally friendly technologies.

Businesses should work against corruption in all its forms, including extortion and bribery.	Company, Pages 80-81 (Driving Ethical Conduct and Corporate Citizenship Throughout Our Business)
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United Nations Sustainable Development Goals

GOAL	LOCATION/DESCRIPTION
No poverty – end poverty in all its forms everywhere.	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security)
Zero hunger – end hunger, achieve food security and improved nutrition and promote sustainable agriculture.	We Are Monsanto, Pages 11-12 (Our Products), 13-14 (Agricultural Innovation: Our Approach to Sustainability), 15-17 (Goals and Progress); People, Pages 27-31 (Helping to Ensure Food and Nutrition Security)
Good health and well-being – ensure healthy lives and promote well-being for all at all ages.	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security), 36-37 (Taking a Global Approach to Community Health and Safety), 45-47 (Promoting Employee Health, Safety and Well-Being)
Quality education – ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	People, Pages 30-31 (Providing Information and Training to Smallholder Farmers), 34-35 (Staking the Future on STEM), 38-40 (Developing Our Employees)
Gender equality – achieve gender equality and empower all women and girls.	People, Pages 40-41 (Embracing the Power of Inclusion and Diversity); Company, Page 80 (Corporate Governance at a Glance)
Clean water and sanitation – ensure availability and sustainable management of water and sanitation for all.	Planet, Pages 59-60 (Ensuring Access to Fresh Water)
Affordable and clean energy – ensure access to affordable, reliable, sustainable and modern energy for all.	Planet, Pages 52-57 (Mitigating and Adapting to Climate Change)
Decent work and economic growth – promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security), 38-40 (Developing Our Employees), 40-41 (Embracing the Power of Inclusion and Diversity), 41-42 (Rewarding Great Work), 48-50 (Forging the Way in Human Rights)
Industry, innovation and infrastructure – build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security); Company, Page 89 (Succeeding in a Competitive Environment), 90-91 (Working with Our Supply Chain)



GOAL	LOCATION/DESCRIPTION
Reduced inequalities – reduce inequality within and among countries.	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security), 36-37 (Taking a Global Approach to Community Health and Safety)
Sustainable cities and communities – make cities and human settlements inclusive, safe, resilient and sustainable.	People, Pages 27-31 (Helping to Ensure Food and Nutrition Security), 36-37 (Taking a Global Approach to Community Health and Safety), 37 (Volunteering for the Greater Good: Monsanto Together)
Responsible consumption and production – ensure sustainable consumption and production patterns.	We Are Monsanto, Pages 11-12 (Our Products); Planet, Pages 52-57 (Mitigating and Adapting to Climate Change), 58-59 (Using Water More Efficiently), 65 (Exploring the Benefits of Healthy Soil), 68-69 (Enabling Responsible Pest Control), 70 (Researching Natural Solutions for Plant Health and Pest Control); Company, Pages 83-85 (Stewarding Product Safety)
Climate action – take urgent action to combat climate change and its impacts.	We Are Monsanto, Page 12 (Data Science), 13-14 (Agricultural Innovation: Our Approach to Sustainability); Planet, Pages 52-56 (Mitigating and Adapting to Climate Change), 57 (Applying Data Science to Feed a Growing Population)
Life below water – conserve and sustainably use the oceans, seas and marine resources for sustainable development.	Planet, Pages 68-69 (Enabling Responsible Pest Control), 70 (Researching Natural Solutions for Plant Health and Pest Control); Company, Pages 83-85 (Stewarding Product Safety)
Life on land – protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	Planet, Pages 61-71 (Biodiversity: Preserving Sustainable Landscapes)
Peace, justice and strong institutions – promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	People, Pages 40-41 (Embracing the Power of Inclusion and Diversity), 48-50 (Forging the Way in Human Rights)
Partnerships for the goals – strengthen the means of implementation and revitalize the global partnership for sustainable development.	We Are Monsanto, Page 22 (Working Collaboratively and Transparently); Planet, Page 55 (Collaborating on Climate Action), 56 (Leading the Transition to a Low Carbon World); Company, Page 92 (Gathering Stakeholders' Perspectives)





INDEPENDENT ASSURANCE STATEMENT

Introduction and objectives of work

Bureau Veritas North America, Inc. (BVNA) has been engaged by Monsanto to conduct an independent assurance of selected environmental indicators for Monsanto's Fiscal Year 2015 (September 1, 2014 to August 31, 2015) to be presented in Monsanto's 2015 Sustainability Report.

This Assurance Statement applies to the environmental indicators listed within the scope of work described below.

The determination of the environmental indicators and other information presented in Monsanto's 2015 Sustainability Report is the sole responsibility of the management of Monsanto. BVNA was not involved in the determination of environmental indicators included in the Report. Our sole responsibility was to provide independent verification of the accuracy of selected information as described below.

Scope of work

Monsanto requested BVNA to verify the accuracy of the following environmental metrics associated with GRI G4 Environmental Indicators for the Fiscal Year 2015 reporting period:

G4-EN3: Energy consumption within the organization

G4-EN4: Energy consumption outside of the organization associated with business travel and logistics

G4-EN5: Energy Intensity

G4-EN8: Total water withdrawal by source

G4-EN10: Total volume of water reused and recycled

G4-EN15: Direct (Scope 1) Greenhouse Gas (GHG) emissions

G4-EN16: Energy indirect (Scope 2) GHG emissions

G4-EN17: Other indirect (Scope 3) GHG emissions associated with business travel and logistics

G4-EN18: GHG emissions intensity ratio

G4-EN21: Other air emissions - NOx, SOx and VOCs

G4-EN22: Total process water discharged by destination

G4-EN22: Process waste water quality for direct surface water discharges

G4-EN24: Total number and volume of significant spills

G4-EN29: Significant fines for non-compliance with environmental laws and regulations

Excluded from the scope of our work is any verification of information relating to:

 Other information (e.g., text and data) associated with Monsanto's 2015 Environmental Sustainability Report that is outside the scope of work described above





Monsanto Assurance Statement Page 2

Activities outside the defined verification period of Fiscal Year 2015

Methodology

As part of its independent verification, BVNA undertook the following activities:

- 1. Interviews with relevant personnel of Monsanto regarding data collection and reporting systems;
- 2. Review of Monsanto's data and information systems and methodology for collection, aggregation, analysis and internal audit of information used to determine the environmental data:
- 3. Review of documentary evidence produced by Monsanto;
- 4. Audit of environmental and energy data traced back to the source for Monsanto facilities located in Antwerp, Belgium; Farmer City, Illinois, USA; Remington, Indiana, USA; Rock Springs, Wyoming, USA and Soda Springs, Idaho, USA during site visits;
- 5. Audit of select environmental and energy data traced back to the source for Monsanto facilities located in Constantine, Michigan, USA; Grinnell, Iowa, USA (2 sites); Maria Eugenia, Argentina; based on information provided remotely and through telephone interviews; and
- 6. Review of the centralized data, methods for consolidation of site data and site data available in the centralized data management system during a visit to Monsanto's headquarters location in St. Louis, Missouri, USA.

Our assurance work was conducted in accordance with the International Standard on Assurance Engagements (ISAE) 3000 and ISO Standard 14064-3 Greenhouse Gases - Part 3: Specification with Guidance for the Validation and Verification of Greenhouse Gas Assertions. In accordance with our internal procedures for limited assurance, we use these as our reference standards.

The work was planned and carried out to provide data verification to a limited assurance level using a materiality threshold of ±5% and we believe it provides an appropriate basis for our conclusions.

Our findings

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the reviewed information within the scope of our verification as detailed above is not materially correct.
- Nothing has come to our attention to indicate that the reviewed information is not a fair representation of the actual environmental and energy data for Fiscal Year 2015.
- It is our opinion that Monsanto has established appropriate systems for the collection, aggregation and analysis of quantitative data within the scope of work specified herein.





Monsanto Assurance Statement Page 3

A summary of data within the scope of assurance for Fiscal Year 2015 is attached.

Statement of independence, impartiality and competence

BVNA is part of The Bureau Veritas Group, an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with almost 180 years of history in providing independent assurance services, and an annual 2014 revenue of 4.2 Billion Euros.

No member of the verification team has a business relationship with Monsanto, its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

BVNA has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities.

Attestation:

John Rohde, Lead Verifier Senior Project Manager

Bureau Veritas North America, Inc.

Denver, Colorado February 8, 2016

Trevor Donaghu, Project Reviewer

Senior Project Manager

Bureau Veritas North America, Inc.





Page 4 Monsanto Assurance Statement

Environmental Metric Description	Value
G4-EN3: Energy Consumption within the organization (1000 GJ)	
G4-EN4: Energy Consumption outside of the organization associated with business travel and logistics (1000 GJ)	
G4-EN5 Energy Intensity Ratio (GJ per \$ Revenue)	
G4EN8: Total water withdrawal by source (1000 M³)	724,000
G4- EN10: Total volume of water reused and recycled (1000 M ³)	
G4-EN15: Total Direct GHG Emissions Source (1000 MT of CO _{2e})	
G4EN16: Energy indirect (Scope 2 – location-based) GHG emissions (1000 MT of CO _{2e})	
G4-EN17: Other indirect (Scope 3) GHG emissions associated with logistics and business travel (1000 MT of CO _{2e})	533
G4-EN18: Scope 1 and Scope 2 GHG emissions intensity ratio (MT CO _{2e} per \$ revenue)	
G4-EN21: Other air emissions (MT)	
Sulfur Oxide (SOx) Emissions, combustion and process	
Nitrous Oxide (NOx) Emissions, combustion and process	
Volatile Organic Compound (VOC) Emissions	
G4- EN22: Total process water discharged by destination (1000 M³)	
Discharged to Off-site Treatment (e.g., POTW)	
Permitted Discharges to the Environment - Subsurface (e.g., deep well injection, leach field)	
Permitted Discharges to the Environment - Surface Water (e.g., river)	16,300
G4-EN22: Process waste water quality for direct surface water discharges (MT)	
BOD	52.3
Nitrate (as N)	55.5
Phosphates (as PO4)	
Total Suspended Solids (TSS)	
G4-EN24: Total number and volume of significant spills (agency reportable releases)	
G4-EN29: Significant fines for non-compliance with environmental laws and regulations (fines ≥\$100,000)	1

GJ = gigajoule MT = metric ton

M3 = cubic meters

CO2e = carbon dioxide equivalent





INDEPENDENT VERIFICATION STATEMENT

To: The Stakeholders of Monsanto

Introduction and objectives of work

Bureau Veritas North America, Inc. (Bureau Veritas) has been engaged by Monsanto to conduct an independent verification of the Working With Our Supply Chain subsection of the Monsanto 2015 Sustainability Report. This Verification Statement applies to the related information included within the scope of work described below.

This information and its presentation in the Monsanto 2015 Sustainability Report are the sole responsibility of the management of Monsanto. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent verification on the accuracy of information included. This is the first year in which we have provided verification over the Working With Our Supply Chain section of the Monsanto Sustainability Report.

Scope of work

Monsanto requested Bureau Veritas to verify the accuracy of the following:

 Data and information included in the Working With Our Supply Chain subsection of the Monsanto 2015 Sustainability Report which includes the Supplier Sustainability Performance Scorecard for the Fiscal Year 2015 (September 1, 2014 through August 31, 2015).

Methodology

As part of its independent verification, Bureau Veritas undertook the following activities:

- 1. Interviews with relevant personnel of Monsanto;
- 2. Review of documentary evidence produced by Monsanto;
- 3. Audit of performance data by a review of approximately 20% of data downloaded from completed Supplier Sustainability Performance Scorecards which were completed in an internet-based application;
- 4. Review of Monsanto systems for quantitative data aggregation and analysis;

Our work was conducted against Bureau Veritas' standard procedures and guidelines for external Verification of Sustainability Reports, based on current best practice in independent assurance.

The work was planned and carried out to provide limited, rather than absolute assurance and we believe it provides an appropriate basis for our conclusions.

Our findings

On the basis of our methodology and the activities described above:

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- Nothing has come to our attention to indicate that the reviewed statements within the scope of our verification are inaccurate and the information included therein is not fairly stated:
- It is our opinion that Monsanto has established appropriate systems for the collection, aggregation and analysis of quantitative data such as Supplier Sustainability Performance Scorecard data.

Limitations and Exclusions

Excluded from the scope of our work is any verification of information relating to:

- Activities outside the defined verification period;
- Positional statements (expressions of opinion, belief, aim or future intention by Monsanto) and statements of future commitment;
- Data from regions not included by Monsanto due to incomplete supplier response.

This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Social and Environmental management with more than 180 years history in providing independent assurance services, and an annual revenue in 2014 of 2.4 billion Euros.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

No member of the assurance team has a business relationship with Monsanto, its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting verification and assurance over environmental, social, ethical and health and safety information, systems and processes, has over ten years combined experience in this field and an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

Attestation:

John Rohde, Lead Verifier Senior Project Manager

Bureau Veritas North America, Inc.

Denver, Colorado February 22, 2016 Trevor A. Donaghu, Project Reviewer

Senior Project Manager

Bureau Veritas North America, Inc.

