



*Kellogg's*<sup>®</sup>

Sustainability  
Milestones  
2016

# Kellogg Company

## 2016 Year-End Sustainability Milestones

December 2016

We strive to make food people love. And today, that means more than food that tastes great. People care about where their food comes from, the people who grow and make it, and that there's enough for everyone. We care, too.

In a world where there are more people and increasingly limited natural resources, we are working hard to help ensure that there is enough food for everyone. Specifically, we are fighting hunger every day and, at the same time, feeding the potential of people around the world. This includes farmers who will play important roles creating longer-term solutions to these challenges for generations to come.

We are looking beyond our foods and towards those who grow our ingredients to improving the livelihoods of farming families and communities. We have pledged to support the livelihoods of a half-million farmers through increasing productivity and climate resiliency by advancing Climate Smart Agriculture practices that help them produce more using fewer natural resources. With more than 35 programs around the world, we are investing in farmers large and small, for example by boosting yields and incomes with training for smallholder and women farmers who can contribute to the world's food supply, but often lack the resources to do so. We're addressing the social and environmental impacts of food loss and waste by reducing post-harvest loss in our supply chain and reducing waste in our own facilities. And we are working to mitigate and adapt to climate change across our value chain, through our science-based Scope 1, 2, and 3 emissions targets, including investment in new technologies in our manufacturing.

We know that reaching our 2020 Global Sustainability Commitments and contributing to creating 3 billion better days for people around the world isn't something we can do alone, so we're actively engaging with our employees, people in our communities, suppliers and partners, and many others who want to join us on this journey. We'll continue to partner with others to bring attention to these important issues. As a leading corporate advocate, we will continue to do so through our involvement with governments, NGOs and other organizations, building programs with suppliers and farmers, and sponsoring of food security research.

In doing so, we seek to fulfill Kellogg Company's purpose of nourishing families so they can flourish and thrive, and honor our heritage rooted in philanthropy and conservation. Kellogg Company's dedication to simple food made by real people and to transparency earns us a seat at millions of tables for generations to come.

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# Kellogg's

## GLOBAL SUSTAINABILITY COMMITMENTS

### RESPONSIBLE SOURCING

**Ingredients / Materials**  
 Responsibly source priority 10 ingredients/materials by 2020



**Sustainable Agriculture**  
 Support 500,000 farmers, focusing on Climate Smart Agriculture, to improve livelihoods



**Smallholder Farmers**  
 Help improve livelihoods for 15,000 smallholder farmers in regions from which we source



**Women Farmers / Workers**  
 Identify women in the value chain & develop programs to help improve their livelihoods, families and communities



### CONSERVING NATURAL RESOURCES


**Energy**  
 By 2020, expand low carbon energy use in plants by **50%** and reduce energy, GHG in plants by an additional **15%\***  
 By 2050 reduce GHG from our operations by **65%** and work with direct suppliers to help reduce their GHG by **50%**



**Packaging**  
 Continue adding value to foods and the planet via increased resource-efficient packaging



**Water**  
 By 2020, implement reuse projects in at least **25%** of plants, reduce usage by additional **15%\*** and continue watershed quality support



**Waste**  
 By 2020, reduce total waste in plants by **15%\***



\* Per metric tonne food produced  
 Goals released August 2014, updated October 2016  
 ®, ™, © 2014 Kellogg Co.

**Recognition**

Through the execution of our 2020 Global Sustainability Commitments and our science-based emission targets to 2050, we have garnered recognition from partners and stakeholders around the world.



SCIENCE BASED TARGETS  
 DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science Based Targets approved by 3<sup>rd</sup> party

One of only five CPGs globally



**Oxfam**



**BEHIND THE BRANDS**  
 MOST IMPROVED


**Refrigerated & Frozen Foods**

Refrigerated & Frozen Foods' 2016 Sustainable Processor of the Year



WWF Ceres

AgWater challenge  
STEWARD  
 ONE OF SEVEN



**CDP**  
 DRIVING SUSTAINABLE ECONOMIES

**A -**

Climate & Water Response

**2016 Australian Packaging Covenant High Performer**



WWF

WWF's Palm Oil Buyer Scorecard



**KELLOGG'S USA**

99



EPA  
 United States Environmental Protection Agency

2030 Food Waste & Loss Champion



KNOW THE CHAIN

NYSE:K  
**32**  
 7 of 20

Supply Chain Human Rights Assessment

15 PLANTS  
 ZERO WASTE TO LANDFILL



### **Natural Resource Conservation Commitments**

In 2008, Kellogg committed to reducing our normalized energy usage, greenhouse gas (GHG) emissions, water usage, and waste to landfill 15-20% by 2015 (from a 2005 baseline). By the end of 2009, we had exceeded the waste to landfill goal (with a 41.5% reduction from the 2005 baseline), so we revised the goal, achieving a 65% decrease by 2015.

In 2014, Kellogg built on our 2008 sustainability commitments with the launch of our second generation of Sustainability commitments two areas: Responsible Sourcing and expanded Natural Resource Conservation goals.

Our global Natural Resource Conservation Commitments include:

- Reduce energy and GHG emissions by an additional 15% (per metric ton of food produced) by 2020 from our 2015 performance.
- Expand the use of low-carbon energy in our plants by 50% by 2020.
- Implement water reuse projects in 25% of our plants by 2020.
- Reduce our water use by an additional 15% (per metric ton of food produced) by 2020 from our 2015 performance.
- Continue watershed quality support.
- Ensure 30% of our plants send zero waste to landfill by 2016.
- Reduce total waste by an additional 15% (per metric ton of food produced) by 2020 from our 2015 performance.

### ***Energy Use and Greenhouse Gas Emissions Commitments***

- Reduce energy and GHG emissions by an additional 15% (per metric ton of food produced) by 2020 from our 2015 performance.
- Expand the use of low-carbon energy in our plants by 50% by 2020.

We recognize that upstream agriculture and our manufacturing are the largest sources of greenhouse gas (GHG) emissions in our value chain and are focusing our efforts on achieving emissions reductions in these two areas.

In August 2014, we renewed our commitment to reducing our manufacturing GHG emissions by an additional 15 percent (per metric tonne of food produced) from our 2015 performance<sup>1</sup>. In December 2015, at the global climate conference known as COP21, we built on this 2020 goal by setting approved

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<sup>1</sup> [https://www.kelloggcompany.com/en\\_US/corporate-responsibility/environment.html](https://www.kelloggcompany.com/en_US/corporate-responsibility/environment.html)

[science-based targets](#) to deliver a 65% reduction in absolute Scope 1 & 2 emissions, which includes emissions from Kellogg's manufacturing, offices and distribution, by 2050 from our 2015 baseline.

As part of our science-based target we also committed to engage all material direct suppliers<sup>2</sup>, including those who supply our ingredients, to reduce absolute Scope 3 emissions by 50% by 2050 from the 2015 baseline. We will gather data through the Carbon Disclosure Project (CDP) Supply Chain and publically disclose progress on our Scope 1, 2 & 3 on an annual basis. We will continue to measure GHG emissions for ongoing improvement for our priority ingredients<sup>3</sup> at a farm level<sup>4</sup>.

These science-based targets are aligned to the [leading methodologies](#)<sup>5</sup> on the subject, were reviewed and approved by the stakeholders behind Science Based Targets, including WRI, WWF and CDP, and were benchmarked with peer members of We Mean Business.

### **In our own Facilities**

Our manufacturing plants continue to reduce their energy usage and GHG emissions while supporting the energy needs of their local communities through both capital projects and employee engagement programs, including the following examples:

- The Kellogg Takasaki plant in Japan installed energy-efficient LED lighting throughout the facility from 2013 to 2016, resulting in nearly a 4.5% reduction in annual electricity usage.
- The engineering team at our Eggo® plant in Blue Anchor, New Jersey, installed fuel cells to help power a portion of the manufacturing facility. Fuel cells use chemical energy or another fuel to cleanly and efficiently produce electricity. Fuel cells work like batteries, but they do not run down or need recharging - they produce electricity and heat as long as fuel is supplied. This project should reduce the plant's GHG emissions by 8%.
- As part of their sustainability plan, the Taloja India plant has continued to adopt new technologies/ by making improvement to reduce energy consumption in environmentally sound as well as financially viable manner. Lighting system in parts of the facility have been upgraded



<sup>2</sup> Suppliers in scope include all suppliers that represent 75% of total spend, including all ingredient suppliers for our priority continuous improvement ingredients.

<sup>3</sup> See 2020 Commitments, [https://www.kelloggcompany.com/en\\_US/corporate-responsibility/environment.html](https://www.kelloggcompany.com/en_US/corporate-responsibility/environment.html)

<sup>4</sup> See 2020 Commitments, [https://www.kelloggcompany.com/en\\_US/corporate-responsibility/environment.html](https://www.kelloggcompany.com/en_US/corporate-responsibility/environment.html)

<sup>5</sup> Sector Decarbonization Approach and 3% Solution – see methodology available:

[https://www.kelloggcompany.com/content/dam/kelloggcompanyus/corporate\\_responsibility/pdf/2015/ClimatePolicyMethodology15Dec15.pdf](https://www.kelloggcompany.com/content/dam/kelloggcompanyus/corporate_responsibility/pdf/2015/ClimatePolicyMethodology15Dec15.pdf)

with LED light fixtures. In addition, few day light panels were added to the warehouse to exploit natural lighting and minimizing use of artificial lighting. This has resulted in energy savings by about 43,241 kWh as compared to that achieved by the use of conventional light fixtures.

- Our team at the Sri City India plant identified a way to eliminate a step in our process which had a positive impact on efficiency, our employees and our energy usage. This resulted in bypassing one process and two conveyers downstream, saving approx. 94500 kWh per year – the equivalent of running 104 U.S. home for a whole month!
- In 2016, five of Kellogg’s bakeries received USEPA Energy Star Certifications for achieving Top 25% of energy performance for their industry nationwide: Augusta, Georgia; Cary, North Carolina; Florence, Kentucky; Louisville, Kentucky; and Seelyville, Indiana. Four of these plants have received this certification for several years running.
- LEED (or Leadership in Energy and Environmental Design) is one of the most popular green building certification programs used worldwide, and our new Pringles plant in Enstek, Malaysia achieved silver status this year. Design elements recognized by the certification body include the building’s overall energy efficient design, which will use 26% less energy than a baseline building and the use of efficient plumbing fixtures, lighting and cooling systems.

More information about our climate policy and the methodology used to develop the science-based targets can be found at [www.KelloggCorporateResponsibility.com](http://www.KelloggCorporateResponsibility.com). A final summary of our 2016 progress against the Sustainability Commitments will be provided in our 2016 Corporate Responsibility Report, which will also be available at [www.kelloggcompany.com](http://www.kelloggcompany.com), in June 2017.

### **In our Supply Chain**


Kellogg is committed to supporting agriculture that is smart for the climate and smart for farmers. Our commitment will increase resilience to the effects of extreme weather and market shocks while supporting improved productivity and reduction of greenhouse gas emissions. As part of our global 2020 Sustainability Commitments and subsequent science-based targets, Kellogg is working across our supply chain to reduce our indirect or “Scope 3 emissions”. Kellogg supports the United Nations framework called Climate Smart Agriculture (CSA).

The three elements of CSA are:

- Productivity at farm level to assure economic livelihoods;
- Resilience and adaptation at the farm level to climate change to assure social livelihoods;
- Greenhouse gas mitigation through sustainable agricultural practices.



In 2016, Kellogg continued our leadership in the World Business Council for Sustainable Development (WBCSD) work stream on Climate Smart Agriculture (CSA) to help address the role business and agriculture can play in achieving a low carbon economy. Through the year we have partnered with other companies and organizations to assess road-test countries, in order to bring the concepts of climate smart agriculture to life in different regions. Kellogg has participated in three summits, from Switzerland to San Francisco to Mumbai. By working with partners around the globe, we can leverage existing programs, build on successful platforms, and engage with local communities for how we can best partner in the future.



**SUPPLY CHAIN**

To connect our suppliers into our science-based targets on emissions, we are asking our global suppliers to report their Scope 1 & 2 emissions to us through the CDP Supply Chain platform. In 2016, 60% of our global spend submitted their CDP climate questionnaire. This data will form our 2015 baseline for our science-based target, against which we will track progress over time.

The CDP Supply Chain submittal is a requirement through our Supplier Expectations and is part of the annual corporate supplier scorecard, along with requirements to participate in Sedex and signing our Global Supplier Code of Conduct. We believe that tying CDP Supply Chain to supplier and procurement evaluations is what contributed to our impressive year one response rate.

**Water Commitments:**

- Implement water reuse projects in 25% of our plants by 2020.
- Reduce our water use by an additional 15% (per metric ton of food produced) by 2020 from our 2015 performance.
- Continue watershed quality support.

We respect the human right to water as defined by the United Nations Committee on Economic, Social and Cultural Rights and General Assembly. Around the globe, fresh water resources are under pressure from climate change, population growth, industrial and agricultural uses, and aging or inefficient infrastructure. Increasingly, businesses and communities are recognizing the critical importance of preserving and protecting water supplies. As a member of the communities where we source ingredients and make our foods, we work to reduce water usage, through increased efficiency and water reuse, as well as watershed quality support, thereby reducing the impact to community water sources.

# Kellogg Company

## 2016 Year-End Sustainability Milestones

December 2016

In 2016, our work to support water conservation in our facilities and in our supply chain was acknowledged by World Wildlife Fund and Ceres, as part of their joint AgWater Challenge. Kellogg, along with six other companies, was selected as the first AgWater Stewards in recognition of our commitments to address water risk in our supply chain.

### In our Facilities

Kellogg uses a combination of internal knowledge and external sources to determine an overall water risk score for each manufacturing facility. Internal information is based on site specific surveys that pull together local knowledge on physical, regulatory, social, and community risk factors. External sources referenced include three leading external datasets that consider exposure to current conditions (quantity, quality, regulatory, social) and projected changes in water quantity over time, based on indices such as population growth and climate change. These datasets include the WBCSD Global Water Tool, the World Wildlife Fund Water Risk Filter and the WRI Aqueduct Tool.

Based on our water risk assessment, which was updated in 2014, the sites within our organization that have the highest levels of water risk include Omaha, Nebraska; San Jose, California; Valls, Spain; and Linares, Mexico. While all Kellogg manufacturing facilities have established water-efficiency goals and are implementing water-saving initiatives, we are paying particularly close attention to water use in these locations.



*Sri City, India facility*



Our facilities are working hard to deliver the 2020 commitments with both capital projects and employee engagement programs, including the following examples:

- In Sri City India, new technologies and procedures were implemented to conserve water in the plant. High pressure jets were installed to replace hoses for the cleaning process. This reduces the time it takes to clean and results in 10,000 liters of water saved annually.
- Taloja India has seen low rainfall & scarcity of water for irrigation. As a result, significant activities have been undertaken to identify water wastage & opportunities for reduction in our Taloja plant. Around 20 pressure compensating aerators are installed in water faucets in admin block which provide a reduced flow rate optimizing water consumption to a great extent. In addition, with use of bio-blocks in urinals, water flushing is not required thereby reducing water consumption & energy used for pumping & treating water. Moreover, treated wastewater is being used for gardening which has eliminated dependency on fresh water. All these initiatives has brought 7449 m<sup>3</sup> of water savings in eight months, in comparison to 2015.
- To reduce water at our Omaha, Nebraska Plant, the team has implemented a project to reduce the gallons per minute of water flow used by equipment called rotoclones. Engineer Matt Tupper, Environment Specialist Paulina Gonzalez, and their team at the Omaha plant also review all equipment during longer clean-ups at their facility when food is not being made to ensure machines are turned off to save water and energy use when they are not needed.
- In our Grand Rapids, Michigan, Plant, the team has developed a plan to re-use their well water. Currently, well water is used for cooling process equipment, and then the water flows into a nearby creek via storm system drainage. With the purchase of a new closed cooler system with an outdoor evaporative spray, the Grand Rapids plant aims to reduce their existing well water use by over 100 million gallons per year. This is approximately 64% of water use at the plant and 2.9% of annual global water use for Kellogg.

A final summary of our 2016 progress against the Sustainability Commitments will be provided in our 2016 Corporate Responsibility Report, which will be available [here](#) in June 2017.

### **In our Supply Chain**

We are actively working with suppliers and growers to address these water related risks, along with climate resilience, as part of our Sustainability 2020 Commitments on Responsible Sourcing, which can be found [here](#).

#### *Kellogg Supports Sustainable Waterways through USDA's Regional Conservation Partnership Program*

The 2014 Farm Bill authorized the creation of a new conservation program known as the Regional Conservation Partnership Program (RCPP), which promotes coordination between the National Resource Conservation Service and its partners to deliver conservation assistance to producers and landowners. With \$1.2B available in funding for on farm projects through 2018, companies, universities, non-profit organizations, and local governments partner to propose projects and contribute matching funds to implement RCPP projects focused on improving soil health, water quality and water use efficiency, wildlife habitat, and other related natural resources on private lands. <sup>1</sup> Kellogg partners and sponsors several RCPP projects in the regions in which we source, detailed below:

#### **Saginaw Bay Watershed Conservation Partnership**

The Saginaw Bay watershed is the largest in the state of Michigan, spanning 5.5MM acres and 22 counties, supporting a diversity of wildlife, wetlands, and some of Michigan's most productive farmland<sup>2</sup> – including farmland that supplies the wheat for Kellogg's Frosted *Mini-Wheats*<sup>®</sup> cereal.<sup>3</sup>

Kellogg supports the RCPP's Saginaw Bay Watershed Conservation Partnership, which will provide a total investment of \$20MM (\$8MM direct, \$12MM technical) to growers in the watershed to implement conservation practices intended to improve water quality through reduction of excess nutrients and sediment in regional waterways throughout the watershed.<sup>2</sup>

Kellogg is a Gold level sponsor with the non-profit conservation organization, [The Nature Conservancy](#), which supports the implementation of the Saginaw Bay Watershed Conservation Partnership along with the Michigan Agri-Business Association.<sup>2</sup> This additional sponsorship supported training for 65 crop advisors and 10 NRCS field staff in the Saginaw Bay watershed, who engage hundreds of farmers every year. Additionally, The Nature Conservancy was able to bring this education to five agribusiness conferences, attended by nearly 200 landowners.<sup>4</sup>

### **Rice Stewardship Partnerships – National and in Southwest Louisiana**

Rice farms, such as those in Louisiana and Arkansas from which Kellogg sources medium grain rice, provide a great deal of food to migrating and wintering ducks. Kellogg supports two Rice Stewardship Partnerships and works with suppliers, growers and other organizations, like industry group USA Rice (USA Rice Federation) and non-profit Ducks Unlimited, to support the conservation of natural resources, including water quality and wildlife habitats.<sup>5</sup>

The National partnership aims to assist up to 800 rice producers in addressing water quantity and quality, as well as wildlife habitat, across 380,000 acres in 6 states (Mississippi, Arkansas, California, Louisiana, Missouri, and Texas), with the main goal to reduce rice production's groundwater demand in the aquifers around rivers and floodplains to ensure sustainability of the water source for future rice production.<sup>6</sup> Specifically in Southwest Louisiana, Kellogg supports the expansion of the Rice Stewardship Program, which works with nearly 30 producers on more than 11,500 acres to address the top resource concerns of water quality, water quantity, and wildlife habitat.<sup>7</sup>



*Duck habitat on rice farmland, Stuttgart, Arkansas*

Midwest Agriculture Water Quality Partnership and Precision Conservation Management

In 2016, Kellogg joined eight other companies and non-profit organizations to form the Midwest Row Crop Collaborative (MRCC). This diverse coalition is committed to working with farmer organizations, environmental groups, and state and local watershed partnerships to contribute to climate change action and help solve local and macro water challenges like Gulf hypoxia and groundwater depletion. The work will begin in three pilot states in the Upper Mississippi River Basin (Illinois, Iowa, and Nebraska).<sup>8</sup> Through Kellogg’s participation in the MRCC, the company also supports the work of two more RCPP programs in the Midwest – in Iowa and Illinois.

The Midwest Agriculture Water Quality Partnership is sponsored by the Iowa Department of Agriculture and Land Stewardship and the Iowa Agriculture Water Alliance and will provide funds to help reduce nutrient loss and improve water quality, soil health, and habitat for at-risk species, with an emphasis on priority watersheds in Iowa. The partnership aims to achieve its goals through using precision agriculture information from farms plus collaboration and training from its partners to increase conservation practices implemented and sustainability metrics reported on those agricultural areas.<sup>9</sup>

Precision Conservation Management (PCM) is a similar program sponsored by the Illinois Corn Growers Association that will use training and precision agriculture information with the goal of integrating conservation into the foundational farm management of commodity crop operations.<sup>9</sup>

Sources: 1) <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/>, 2) <http://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/michigan/projects/Documents/New%20RCPP%20Factsheet.pdf>, 3) [https://www.kelloggcompany.com/en\\_US/socialk/conserving-water--wildlife-where-grains-are-grown.html](https://www.kelloggcompany.com/en_US/socialk/conserving-water--wildlife-where-grains-are-grown.html), 4) [http://www.saginawbayrcd.org/pdf/SaginawBayRCPP\\_factsheet.pdf](http://www.saginawbayrcd.org/pdf/SaginawBayRCPP_factsheet.pdf), 5) [https://www.kelloggcompany.com/en\\_US/socialk/conserving-water--wildlife-where-grains-are-grown.html](https://www.kelloggcompany.com/en_US/socialk/conserving-water--wildlife-where-grains-are-grown.html), 6) <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ar/programs/farmbill/rcpp/?cid=nrcseprd386611>, 7) <http://www.ducks.org/louisiana/new-nrcs-program-supports-ricelands-conservation-in-louisiana>, 8) <https://www.keystone.org/our-work/agriculture/midwest-row-crop-collaborative/>, 9) <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/farmbill/rcpp/?cid=nrcseprd598407>

Kellogg’s Grower Survey Locations

- |   |   |  |
|---|---|--|
| 11. Bangladesh: Bangpur, Bogra, Kurigram, Chandpur, Joypurhat, Narsingdi, Munshigani, Gaibandha | 21. France: Nord Pas-De Calais                                    | 28. Argentina: La Pampa, San Luis Este, Entre Rios, Buenos Aires, Tucuman, Santa Fe, Cordoba |
| 12. Turkey: Manisa - Sanuhanli  | 22. Belgium: Heuvelland, Henegouwen, West-Blaanderen, Vlaanderen  | 29. Colombia: Beta, Guayabal   |
| 13. United States (18 States)   | 23. Netherlands: Overijssel, Drenthe, Noord Brabant, Luid-Holland | 30. Brazil: Goias  |
| 14. UK: Northamptonshire, Berkshire   | 24. Germany: Niedersachsen  | 31. Australia: Queensland  |
| 15. Spain: Albacete, Cuenca, Valencia, Seville  | 25. Chile: Region Del Maule, Curico                               | 32. China: Hebei, Shandong, Jiangsu  |
| 16. Italy: Pavia; Novara, Vercelli, Alessandria   | 26. Canada: New Brunswick, Ontario                                | 33. Mexico: Sinaloa, Penajemo, Abasolo, Guanajuato   |
| 17. Thailand (4 watersheds)   |   |  |
| 18. South Africa: Lambasi, NW, Mpumalamga, Teluguone  |   |  |
| 19. Bolivia: La Paz   |   |  |
| 20. India: Pune, Maharashtra, Karnataka   |   |  |

*Kellogg Company joins 8 other companies and NGOs to support continuous improvement in the Upper Mississippi River Basin*

The Midwest Row Crop Collaborative is a diverse coalition working to expand agricultural solutions that protect air and water quality and enhance soil health while remaining committed to producing enough food to feed the growing global population. These leading companies and conservation groups are all committed to building a broad partnership in three pilot states: Illinois, Iowa, and Nebraska. This group will measure and deliver improved environmental outcomes through cross-sector collaboration and continuous improvement at a meaningful scale throughout the Upper Mississippi River Basin. The Collaborative strives to meet the challenge of producing enough food, fiber, and fuel for a rapidly growing population expected to exceed 9 billion people by 2050, while also conserving and improving natural resources and ensuring the ability of future generations to meet their own needs. The Collaborative's aim is to provide leadership in contributing to climate change action and helping solve local and macro water challenges, such as Gulf hypoxia and groundwater depletion, by working with growers to help foster improvements.

*Goals*

A key measure of success is the Collaborative's ability to blend and leverage this effort with the various technical and regional information and efforts already in place. Forging partnerships with local partners is absolutely essential to eliminate redundant efforts across the various organizations and partners.

Most importantly, the Midwest Row Crop Collaborative is committed to working with others — farmer organizations, environmental groups, and state and local watershed partnerships — to achieve the goals outlined in the Gulf Hypoxia Taskforce action plan and respective state nutrient and water loss reduction plans. Learn more about our goals [here](#).

*Scaling Solutions*

The Collaborative wants to support, enhance, and accelerate the environmentally-friendly agricultural practices already underway in Illinois, Iowa, and Nebraska to deliver more food while improving water and air quality, optimizing irrigation efficiency to conserve water and reducing greenhouse gas emissions. Through cross-sector collaboration, the Collaborative is seeking to build a broad partnership to measure and deliver improved outcomes on climate change, water use, and water quality that can be scaled up throughout the Upper Mississippi River Basin.

### **Waste Commitments**

- Ensure 30% of our plants send zero waste to landfill by 2016.
- Reduce total waste by an additional 15% (per metric ton of food produced) by 2020 from our 2015 performance.

In 2014 as we launched our second generation of sustainability commitments, we set a target to ensure 30% of our plants send zero waste to landfill by 2016. We set this as an interim target following our experiences in our first generation of commitments where we exceeded two consecutive waste to landfill reduction targets, achieving an overall waste reduction of 62% since 2005.

We are proud to share that we achieved this 2016 zero waste to landfill target by significantly increasing recycling of materials in our facilities. However, while we will continue to focus on zero waste to landfill, we intend to put increased focus on reducing total waste as a first step, then still ensuring re-use, recycling and other uses to avoid sending waste to landfill. Therefore we have established a new waste target, with the goal of reducing total waste 15% (per metric tonne of food produced) by 2020, using 2015 as our baseline. This aligns with our other Natural Resource Conservation goals.

We also take a holistic view of waste across our value chain, which is a global food company has particular emphasis on food waste.

As a global food company, we believe we have a significant role to play in helping to end hunger, achieve food security, improve nutrition and promote sustainable agriculture, aligned with the United Nations Sustainable Goal #2.

In addition, we will do our part to halve per capita global food waste at the retail and consumer level, and to reduce food losses along the production and supply chains including post-harvest losses by 2030 which is aligned with the United Nations Sustainable Goal # 12.3.



Lending our voice to collective action, leadership and advocacy to help address the issues of food waste is important to us. In 2016, Kellogg was one of the first U.S. based companies to join Champions 12.3, a unique coalition of leaders across sectors dedicated to inspiring ambition, mobilizing action, and accelerating progress toward halving food waste by 2030. Kellogg was also one of the first companies to become a U.S. Food Loss and Waste 2030 Champion, signing onto a joint initiative between the Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA).



A critical element to this work is helping to eradicate food waste from food systems. We contribute in three important ways:

- **FARMS:** Working to eliminate post-harvest loss so that more of the food which is grown is consumed. We are working with partners to develop and promote post-harvest loss reduction practices in major ingredients relevant to Kellogg by developing sustainable agriculture programs with smallholder farmers in India, Bangladesh, South Africa, Thailand, Philippines and other countries which promote and improve post-harvest loss reduction.
- **MAKING:** Working to eliminate food waste in our processes, capturing it instead to feed people in need, and when that use is not appropriate, ensuring it is used for animal feed. We are doing so by setting new commitments to reduce our total waste and achieving zero waste to landfill in 15 manufacturing sites.
- **COMMUNITIES:** Through our Breakfasts for Better Days purpose platform, working to assure our food also goes to help those in need, either due to disaster relief or chronic hunger, working with partners in communities around the world.

### In our Facilities

As part of our sustainability commitments, we achieved the goal we set in 2014 to ensure 30% of our plants send zero waste to landfill by 2016. Examples include:

- The Belleville, Ontario plant is working towards zero waste to landfill by replacing waste collection bins with recycling bins for wood, plastic, metal and cardboard throughout the warehouse. Liquid waste that is collected now goes to bio digestion to make biofuel. This enables supplier-related materials to be diverted from the warehouse for reuse. Chocolate waste is now composted, whereas previously any chocolate waste went directly to the landfill. The team also expanded recycling streams within its offices for plastic, metal and cardboard.
- The Chicago 31st Street plant is also working towards zero waste to landfill. The team started a waste diversion program in January 2014. For the first seven months of 2016, the team was able to reduce waste to landfill by an average of 200 lbs. per day, a 91% reduction. The team unlocked methods to send wood pallets to the Chicago Bakery for use instead of recycling. They also created a contest for employees to submit



Chicago 31st St. facility celebrating their initial goal of 30 Days without filling their compactor

thoughts on how to reduce, reuse and recycle.

- The Kellogg Dubai office launched the Coco Green Team in 2016, which rolled out several effective programs in its first year. Among the initiatives that were implemented included placing clearly marked recycling bins for paper, plastic and cans in the kitchens. To dispose of printed paper, they introduced green boxes near the printers, which in just three months, have managed to save the equivalent of two full trees. During the holy month of Ramadan, employees of the company re-used boxes and filled them with food, basic necessities and Kellogg snacks to distribute to laborers that worked outdoors in the heat while fasting. Finally, to maintain the GoGreen theme throughout the office, employees were given seed-head pencils and empty Pringles cans. Once the pencils were used up, the team was instructed to plant them inside the Pringles can with soil and water so that they could flourish into mint and clove plants.

Kellogg has committed to reporting against the Waste Resources Institute Food Loss and Waste Protocol in 2017, with 2016 baseline data. Preparation included adding tracking capability against all seven elements of food waste across our global facilities:

- Animal feed
- Bio-recycling
- Composting
- Incineration
- Land application
- Landfill

These are elements of food waste which we track for the protocol but also against our global sustainability commitments. We will report baseline food waste data in our Corporate Responsibility Report in June 2017.

### **In our Supply Chain**

Kellogg is committed to reducing food loss and waste by 50% by 2030 through prevention, recovery and recycling. Our Postharvest Loss Reduction Program began in 2015, bringing Kellogg's research and development team, cereal scientists, and sustainability team together work collectively on this important issue. Kellogg has funded and/or built programs with many leaders in the field to research ways to reduce food loss and improve sustainable agriculture practices globally:

- Through a partnership with International Rice Research Institute (IRRI) we validated research to identify causes of low milling yield for a rice variety. The plant flowering time was identified as the major cause of low harvest and milling yields. Research was able to shorten the maturity range, significantly increasing the milling yield. Postharvest training for Thai millers is planned for mid-2017 to continue on this progress.

- For our rice project in the Philippines, we sponsored 9 heirloom rice farmers to attend the 2-week postharvest management training at IRRI. They assisted IRRI engineers during the basic postharvest training of 57 farmers in 4 Mountain Province locations. The team conducted pilot tests of the Solar Bubble Rice Dryer and funded rice quality assessment kits to each of the training participants.
- With the University of Arkansas, Kellogg conducted a postharvest management workshop for farmers and millers, hosted by our supplier Windmill. Kellogg also initiated a collaboration with USDA and Arkansas farmers to measure impact of climate smart agriculture on resource use, water quality, greenhouse gas emission and rice harvest and milling quality.
- Through Kellogg funding, Wageningen University teamed with European researchers in assessing potato storage facilities/practices and their effect on potato quality, specifically, reducing sugars that are critical for Pringles. The team developed an action plan that will include improvement of growing practices and knowledge transfer and “on-the-job training” which is planned for 2017.
- In Mexico, Kellogg supported our partner CIMMYT, the Innovation Center on Maize and Wheat, to host two postharvest management training courses to stakeholders, specifically farm advisors certified in sustainable agronomic practices. Thirty-five farm advisors attended the first course in central Mexico, and 30 attended the second course in southern Mexico. To date, the attendees of the two specialized postharvest training courses have contributed to the training of 80 farmers. An initial analysis was also performed with 1,244 farmers surveyed from 16 Mexican states. The survey will inform our work on providing decision tools to farmers, using big data analytics, specifically on postharvest risks.

## **Responsible Sourcing**

In addition to our conservation of natural resources, Kellogg has committed to responsibly source its priority ingredients and support agriculture which is smart for our climate and smart for the growers. This commitment will enable improved resilience to impacts from things such as weather events or market shocks, productivity, particularly for smallholder farmers, and reduction of greenhouse gas emissions.

Our Global Responsible Sourcing Commitments include:

- Responsibly sourcing our 10 priority ingredients by 2020: rice, wheat, corn, potatoes, sugar beets, sugar cane, cocoa, palm oil, fruits (including strawberry and raisins/sultanas) and vanilla
- Improve sustainable agriculture by enabling 500,000 farmers to implement more sustainable farming practices using Climate Smart Agriculture
- Support 15,000 smallholder farmers in our direct supply to increase adoption of climate-smart agriculture and help improve their livelihoods and climate resiliency
- Develop programs to help women improve their livelihoods, families and communities using Climate Smart Agriculture

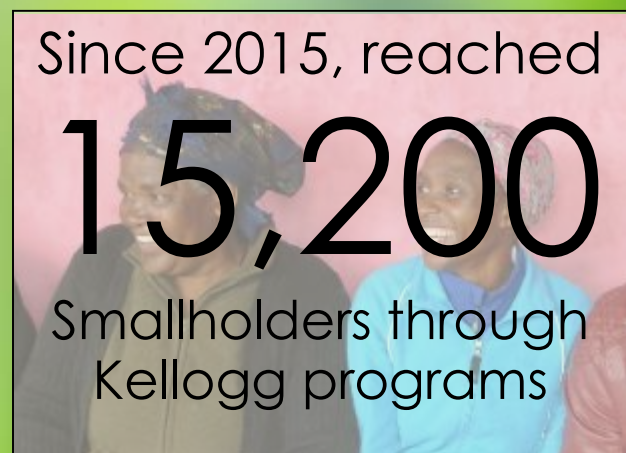
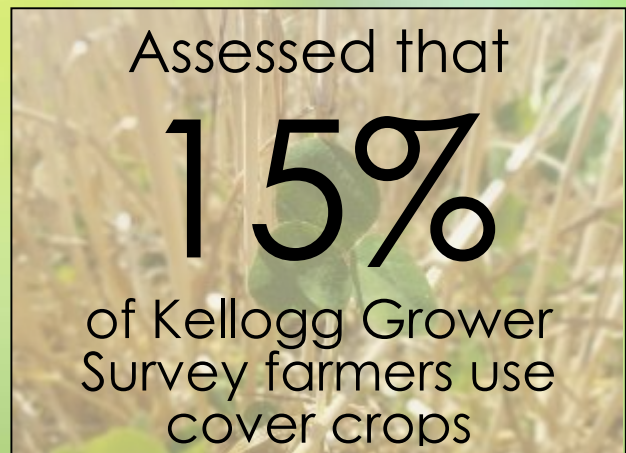
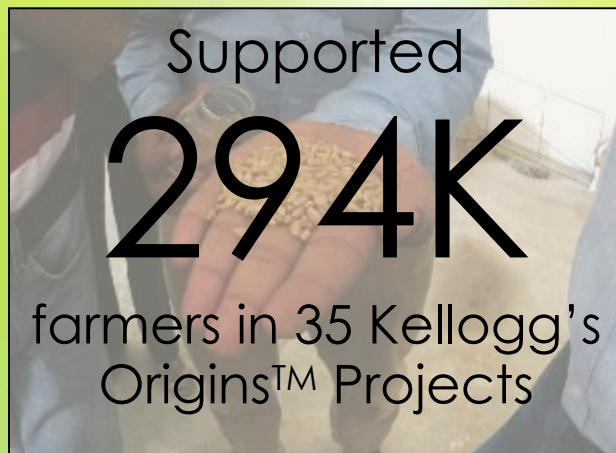
### ***Definition***

Responsible sourcing at Kellogg means supporting livelihoods and/or measuring continuous improvement on input optimization and environmental impact such as biodiversity, water use and quality, energy and fertilizer use, greenhouse gas emissions, and soil health.

### ***Measuring Progress on our Priority Ingredients***

Kellogg is measuring continuous improvement for our priority row crop and fruit ingredients through the Kellogg Grower Survey, or industry standard tools like Field to Market's Fieldprint® Calculator, Sustainable Agriculture Initiative's Farmer Self-Assessment and the Cool Farm Tool. Through these initiatives in support of setting our 2015 baseline, we are reaching nearly 1,200 farmers in 21 different countries.

## SUSTAINABLE AGRICULTURE FINDINGS IN 2016



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Once we have data on the needs of the communities through the Kellogg Grower Surveys, we often will partner with suppliers, farmers, scientists and non-governmental organizations to support farmer livelihoods and environmental outcomes. Building these programs is in collaboration with key stakeholders, including the farmers and the local community, and focus on:

- Research and technical assistance on climate smart agriculture
- Training on farm management and agronomic practices
- Access to markets and financial resources

These sustainable agriculture programs are known as Kellogg's Origins™ Program. Our projects are located in the regions from which we source but not necessarily within the Kellogg supply chain and provide support to farmers on climate smart agriculture practices or support farmer and worker livelihoods through research, training, market access, finance, etc. Through our work with suppliers,



millers and growers, and other partner stakeholders we provide data, maps, tools, agronomic support, and/or training to support continuous improvement in climate adaptation, including for smallholder farmers, optimization of fertilizer inputs while measuring and improving greenhouse gas emissions, optimization of water use and improvement of soil health including irrigation methods and new technologies.

### **Responsible Palm Oil**

Palm oil is one of our 10 priority ingredients, and due to the inherent environmental and social risks in the palm value chain, continues to be an ingredient of particular focus for Kellogg Company in our responsible sourcing efforts. Although we use a very small amount of palm oil globally, we have been

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working since 2009 to improve the sustainability and responsible sourcing of the palm oil in our ingredients to improve both environmental and social impacts. Kellogg is committed to working with our global palm oil suppliers to source fully traceable palm oil to known and certified sources that are environmentally appropriate, socially beneficial, and economically viable, in adherence to the principles in our Palm Oil Commitment.

In 2015, Kellogg signed agreements with FoodReg to use their KnownSources platform to trace palm throughout the Kellogg supply chain. Going forward, Kellogg will be engaging with ProForest, a leading non-governmental organization, to access traceability, determine risk, and support the development of action plans. This third party assessment will work with existing supplier-led auditing and will perform independent reviews. We are proud that our work was recognized as leading by WWF in their [Palm Oil Scorecard](#).

Additional information on our work through 2016 including information about our principles, our requirement for our supply to trace palm oil to plantations with action plans to close the gaps, and our milestones are available in our [Sustainable Palm Oil Policy](#) and Milestones Document.

### ***Sustainable Agriculture***

Kellogg has committed to support the livelihoods for 500,000 farmers through partnerships, research and training on climate smart agriculture which helps farmers adapt to climate change while assuring productivity of their yields and reducing greenhouse gas emissions from their agricultural practices by 2025. This target is powered by our Global Sustainability Commitments to responsibly source our 10 priority ingredients and brought to life through the launch of the next generation of our Breakfasts for Better Days purpose platform. We're not only honoring our heritage of philanthropy and conservation, but also fulfilling our company's purpose of nourishing families so they can flourish and thrive. A few examples are below on how we are engaging nearly 300,000 farmers on this journey.



*Rice farmer, Manolo, in Spain*

*Kellogg's Origins™ Program in the UK – Getting to the Heart of the Special People and Natural Places That Grow Our Ingredients*

Kellogg's commitment to responsibly source and sustainably grow our ingredients, along with our pledge to help improve the livelihoods of farmers, is in part realized through the work of our Kellogg's Origins™ Program. We call it Kellogg's Origins™ because it goes right back to the beginning - to where our ingredients are planted and grown. Kellogg's Origins™ projects are designed to support our farmers by providing access to expertise and latest thinking to encourage climate smart improvements to agriculture practices. In Northampton, United Kingdom, wheat farmers like Stephen are among the founding members of the Kellogg's Origins™ Program, which was developed in the UK to address the needs of British wheat farmers with training in soil health and fertility, crop quality, invasive weeds, natural and environmental farming.

Kellogg's enlisted a team of experts to provide in-field practical training, on-farm crop trials and farmer exchange sessions. Stephen attends regular meetings to work with farming experts and like minded farmers, to help deal with various problems and share knowledge together. Also, as part of the Kellogg's Origins™ Program, the Natural Heritage initiative supports British farms by bringing back insects, wild plants and other natural species to the countryside, and to help recover and protect the natural balance that creates rich and productive soils. With soil health, everything starts with ensuring the farmer has the right nutrients in the soil and great soil structure to allow the crop roots to grow strong. A way to help boost that is through promoting the use of cover crops. Cover crops can benefit farmers by aiding in erosion control, increasing organic matter in the soil, and reducing nitrate losses into the surface waters. They have also been proven to improve soil structure and improve drainage.

Since participating in the Kellogg's Origins™ Program, Stephen has planted winter beans as his farm's cover crop. He also provides environmental bridges and hedges across the farm to encourage insects such as bees and insects – vital to pollinate the plants and to act as natural protection for the crop and the wider environment – and to attract birds and small animals. One key finding from the cover crop work, in spring 2016, was an average 20 percent increase in worm numbers across Kellogg's Origins™ sites, which is an excellent indicator of biological activity and function in soils. Where cover crops are used on a routine basis, farmers like Stephen were able to improve soil structure to aid crop root development and add organic material to the soils to support soil biology; this all helps increase soil fertility. As a result of using cover crops, nitrate leaching was reduced on those same sites by an average of around 40%.

“We want to ensure we are leaving the land in a better condition than when we first started farming,” adds Stephen.



To help generate greater awareness of the benefits of cover crops, Kellogg's developed a Natural Heritage 'Cook Book', which is a guide funded and produced by Kellogg's Origins™, technical experts to provide guidance to the benefits, selection and production of cover crops. The book has been made available to around 3,000 farmers and experts throughout the UK.

*Kellogg Company joined Bayer Crop Science, Farm Frites in Food Chain Partnership initiative to support sustainable agricultural practices in European potato cultivation*

Kellogg Company joined Bayer Crop Science and Farm Frites in a Food Chain Partnership project designed to implement sustainable agricultural practices in potato cultivation in the Netherlands and Belgium. The goal of the partnership is to support a bottom-up approach with potato farmers addressing value-adding sustainable potato-growing practices at individual farm level. This is intended to minimize the environmental impacts of agricultural production and keep potato farming attractive in the long term for farming communities.

Within this initiative, the partners use demonstration farms to share sustainable agriculture practices with farmers across Belgium and the Netherlands. Bringing together the supply chain is at the core of what make this project unique. Through Bayer's expertise, a toolbox of available measures was created to cover a broad range of topics: biodiversity, erosion, soil fertilization, stewardship, energy, product quality, pest and disease monitoring as well as advice on the efficient and safe use of crop protection products.

Up to now, seven pilot farms, four in Belgium and three in the Netherlands, which supply potatoes to Farm Frites have been selected over the last two potato seasons. Involved 'Ambassador' farmers were interviewed individually to identify the sustainable measures best suited to optimizing their own farm operations and meeting individual farm needs. Based on the individual selection and prioritization of activities at the pilot farms, action plans were defined in a bottom-up approach together with Farm Frites and Bayer to jointly implement and follow up on specific activities throughout the potato-growing season.

To encourage interaction and provide a platform for sharing experiences and knowledge among farmers Kellogg Company, Bayer and Farm Frites are organizing an annual 'Tour de Farm', a set of open field days at the pilot farms. Kellogg Company will be sharing the learning from these events across their supply chain.

**Field to Market® partnership in the U.S. helps Kellogg achieve Sustainability Commitments**

In the U.S., to ensure progress is being made towards our 2020 Sustainability Commitments, Kellogg is a member of *Field To Market*® and uses the *Fieldprint*® calculator, wherever possible, to measure continuous improvement of agricultural practices in the places where our priority ingredients are grown. [Field to Market](#) is a diverse collaboration working to create opportunities across the agricultural supply chain for continuous improvements in productivity, environmental quality, and human well-being. By providing measurement tools and resources that are outcomes-based and grounded in science, they help growers and the supply chain benchmark sustainability performance, catalyze continuous improvement, and verify sustainability claims. As a member of this alliance, Kellogg has participated in the development of the calculator.

As of 2016, Kellogg is engaged in five *Fieldprint* projects:

**Bunge Milling *Centerfield*® Corn Programs (Crete, Nebraska; Danville, Illinois; Atchison, Kansas)**

Kellogg Company and Bunge North America's three *Centerfield* Programs in Crete, Danville, and Atchison have been developed to track and analyze sustainability metrics and measure continuous improvements through the *Fieldprint* calculator. These projects, which cover approximately 122,000 acres, engage growers by using technology to input crop data at the farm level and by sharing data outcomes over time to support implementation of best practices. Bunge North America visits more than 75 growers in these three *Centerfield* programs a minimum of five times throughout the growing season to document metrics such as water usage, soil erosion, greenhouse gas emissions, and crop progression. With the *Centerfield* Program, Kellogg and Bunge and the participating growers share best practices in sustainable agriculture and enhancing traceability from farm to table and, at the end of the growing season, all of the data collected is available to the growers.

**Great Lakes Wheat Program (Michigan)**

In 2015, Kellogg Company launched the *Kellogg's Origins*™ Great Lakes Wheat Program to track continuous improvement for key environmental sustainability indicators in Kellogg's soft white winter wheat supply chain within the Saginaw Bay region of Michigan. We recognize that farmers already use conservation practices, helping them to protect the environments where our grains begin their journey. This program allows farmers who supply into our supplier *Star of the West* Milling to document their on-farm improvements with 16 farmers on over 50,000 acres across their crop rotation. The data is collected through farm management tools provided by *Syngenta* and is in alignment with *Field to Market*.

Working closely with the farmers who grow ingredients for our suppliers helps us tell the stories of our food. In 2015, Kellogg nominated one of our *Kellogg's Origins*<sup>™</sup> farmers, Rita, as a White House Champion of Change. Rita was chosen as one of the 2015 winners for her work in the community to promote agriculture and adopt conservation practices. Justin, a wheat farmer from Frankenmuth, has provided a unique millennial farmer perspective and has hosted many executives and food developers at Kellogg so we can learn more about the precision agriculture, cover crops, and continuous improvement tracking that contribute to the sustainability of his family's farm. Finally, Mike, a 4<sup>th</sup> generation farmer who has been participating in the program, was recently highlighted by *Field to Market* in their Farmer Spotlight. More about these sustainability champions can be found at [www.OpenforBreakfast.com](http://www.OpenforBreakfast.com), Kellogg's website to share stories about our foods and company.

#### **Pacific Northwest Wheat Program (Southeast Idaho/northern Utah)**

In the summer of 2016, the *Kellogg's Origins*<sup>™</sup> Pacific Northwest Wheat Program was launched with our supplier, Ardent Mills. The project measures continuous improvement against key environmental and social indicators utilizing the *Field to Market Fieldprint* calculator, with a goal to reach approximately 15 farmers across 15,000 soft white winter wheat acres in southeast Idaho and northern Utah. The wheat from this region is sent to Kellogg's Mexicali plant and used in various Special K and Raisin Bran products.

#### **Unlocking a Community's Well-Being through the Ancient Grain, Amaranth**

A warm wind blows through vibrant purple fields of amaranth in the small community of Huixcazhdha, Mexico. In this town of fewer than 500 people located in Central Mexico, the families that live here are healthy and thriving. They have a stable economy; children are well-nourished, and households have a stable income. But it wasn't always this way. During the last quarter of the 20<sup>th</sup> century, Huixcazhdha had been struggling. At one point nearly 2 out of 3 children in the village were malnourished, they lacked access to drinkable water and had no electricity.



Pictured: Amaranth Plant, Huixcazhdha, Mexico, Pictured: Benito Manrique Source: CAROLE SIMONNET//AGENCIA REFORMA

It wasn't until a man named Dr. Benito Manrique visited Huixcazhdha some 20 years ago that it all started to change. Benito was born in the region and experienced the societal issues first-hand. After graduating from medical school, he joined the World Health Organization and was inspired to find a way to help communities gain access to basic needs.

In 1987, Benito founded San Miguel de Proyectos Agropecuarios, a grain processing company. The ancient grain amaranth, known for its outstanding nutrition profile of being a good source of protein and fiber, is a staple food for many communities in Mexico. While amaranth had never been grown in Huixcazaha, Benito had the vision to bring the processing of amaranth into the community to create jobs to boost the local economy. His theory was that this ancient grain could unlock their well-being by fighting malnutrition and creating a better, more sustainable future.

In just a few years, Benito built a facility to process the grain, which has created about 70 jobs for the local people. Recently, the focus has turned towards enabling the village to grow amaranth on their own as another way to build the local economy.

Unfortunately, Benito passed away before he could see that work come to fruition. But, his legacy lives on. His brother, Diego, has taken over the company and today, amaranth is a key source of nutrition. With Diego's leadership, they are growing the farmer program and creating a new source of income for the village. And to help educate the families, he set up a "Little Tribe" program in the school, designed to generate awareness on the importance of good nutrition and maintaining a proper diet.

**The Program:**

Kellogg has been sourcing amaranth from San Miguel de Proyectos Agropecuarios for more than ten years. First with *Nutri-Grain*® bars, and most recently, with *Special K*® cereal and *Kellogg's*® *Granos Ancestrales* cereal and bars sold in Latin America. During the early years of the partnership, Kellogg's quality team was instrumental enabling San Miguel to match quality standards that would open their opportunities to a greater marketplace.

"Working with the communities has always been our mission," said Diego. "The model is built beyond economic growth. It's about the happiness and well-being of the people. We don't make any decisions or investments without consulting with the community first."

**Results:**

Today, 20 years later, the town is free of malnutrition and every family in the community works at the processing facility. Amaranth is part of their diet, but the economic growth has enabled them to overcome malnourishment.

We are proud of our work with San Miguel de Proyectos Agropecuarios. At Kellogg, we seek partners that best align with our values and offer unique skills to help [build better days](#) for people in need around the world. Kellogg will continue to source Amaranth from San Miguel and are currently working towards identifying other opportunities where our two companies can partner to make a difference.

This work not only is aligned with our [global sustainability commitment](#) of supporting smallholders with access to Climate Smart Agriculture practices, but it also is aligned with our *Breakfasts for Better Days*® purpose platform, partnering with communities through our supply chain to address hunger, malnutrition and food insecurity. For more information, please visit [www.breakfastsforbetterdays.com](http://www.breakfastsforbetterdays.com).

***Smallholders and Building Climate Resiliency***

Kellogg recognizes that women often play a significant role in agriculture, but in some countries still face challenges of injustice and inequality. Kellogg is identifying the parts of our supply chain with the highest prevalence of women, while identifying the risks and opportunities they face, depending on their communities and regions. We recognize the importance of communities' right to access and control of land, especially the land that enables food security.

That's why Kellogg made a commitment in 2015 to help increase the adoption of climate-smart agriculture practices for smallholder farmers. We are proud that, through partnerships and collaboration, we have scaled our work to help improve the livelihoods of 15,000 smallholder farmers to meet our commitment four years ahead of schedule.

*Elsie's Story*



Elsie Nosenga grows maize on a small plot of land in South Africa to support her family of 10. That's 10 people to feed from a modest harvest that also serves as her main source of income.

As a smallholder farmer, Elsie is one of an estimated 90 percent of smallholders who lack access to expertise on best practices, technology and management solutions that could help her maximize yields and income. Worldwide, women farmers participate in just five percent of the agricultural education services available and only own two percent of land.

These challenges exist before even considering the impacts of climate change – drought, water scarcity, crop failures, civil unrest, migration and poverty. All of which can cause devastating outcomes to agriculture across our global supply.

That's why we are so proud to hit our smallholder target within just two years, through our collaboration [with TechnoServe](#) and suppliers from around the world. These efforts have resulted in higher yields, stronger climate resilience, and better livelihoods for smallholder farmers and their families.

This doesn't just improve Elsie's bottom line, but raises her income and ensures that together, our food system is secure for future generations.

***Pollinator Health and Crop Inputs***

At Kellogg, we know that having strong, healthy populations of pollinators, like honeybees, plays a vital role in the world’s food supply chain. We recognize that pollinator health is impacted by a variety of factors, including lack of suitable habitat, increased levels of disease, need for improved colony management, and exposure to pesticides, as outlined in the White House Pollinator Research Action Plan. We are taking action in several areas to begin to address these concerns.

For example, Kellogg supports the White House Pollinator Health Task Force’s strategy and its call for research, public education, and public/private partnerships to support pollinator populations. We also support improved habitats and protection for pollinators from harmful exposure to pesticides. We are participating in five USDA Regional Conservation Partnership Programs, which support cost share for farmers looking to implement conservation practices on their farms, such as buffer strips.

As we talk with suppliers and partners, we continue to look for other opportunities to understand and address risks related to this important issue. For example, we know from discussions with suppliers that farmers in their milling areas are increasingly using best practices such as measuring for optimal wind conditions when applying pesticides. And more than half of the farmers whom we’ve directly engaged through our suppliers are using integrated pest management and we see increasing use of buffer strips, grass runways and windbreaks which provide pollinator health support.

Separate from pollinator health, we also know that some consumers have questions about the use of the herbicide glyphosate as a desiccant just prior to harvest, particularly on wheat. We understand these questions and, while the practice is rarely used in the industry, we plan to discuss them with our suppliers in the coming year and will survey them to learn more.



**Employees and local urban farmer at Manchester facility tending the bees**

### ***Animal Welfare***

As a socially responsible company, Kellogg has always been committed to responsible sourcing, including protecting animals. Even though we are a grain-based company and we use very few animal products in our foods, we embrace the important role we play in influencing responsible and sustainable behavior throughout our supply chain.

We are proud of our progress so far. In fact, we've been working to reduce our use of eggs from caged hens since 2007. And in 2015, we extended our U.S. commitments by: focusing further on cage-free eggs, closely examining the very small volume of pork we purchase and specifying key principles of animal welfare. To learn more about our commitment, please see [our policy](#).

### **Engaging Procurement in Sustainability and Social Accountability**

This year we have continued to formalize and refine standard operating procedures internally and with suppliers to align with our sustainability and human rights commitments and further embed responsible sourcing into our day-to-day activities.

We recognize the important role our procurement functions have in advancing our global responsible sourcing commitments. Engaging and partnering with our suppliers throughout the value chain is essential to our work in the areas of human and workplace rights, environmental protection, and sustainable farming. We set clear expectations, seek to drive accountability, and assess potential and actual risk that our supply chain operations may cause or contribute to both directly and indirectly. This means that we hold our suppliers and their operations to the same level of accountability to which we hold our own facilities and employees. Kellogg has over 20,000 suppliers globally, each a key partner in our success. Through best in class



supplier engagement and development, we aim to realize the full potential of our supplier base in order to achieve a competitive advantage and support our Global Sustainability Commitments. In 2016,

Kellogg began rolling out an enhanced structured supplier engagement process for holistic end to end supplier relationship management. The process includes three main steps:

- 1) Segmenting our supply base to identify key suppliers based on capabilities, level of spend, service, purchased commodity, region, and risk salience.
- 2) Establishing a joint business planning process with our key suppliers including the evaluation of five priority supplier engagement & development areas: Responsible Sourcing, Financial Excellence, Operational Excellence, Innovation, and Supplier Diversity, and
- 3) Measuring supplier performance management through annual scorecards where we review the level of adherence to Kellogg's expectations. These expectations include key performance indicators related to our five priority areas: Responsible Sourcing, Financial Excellence, Operational Excellence, Innovation, and Supplier Diversity. Included in the requirements are specific actions on the part of the supplier such as the disclosure and allocation of greenhouse gas emissions through CDP Supply Chain, registration on the Sedex platform and completion of the Self-Assessment Questionnaire, and agreement to requests for third party compliance verifications through social auditing.

Responsible sourcing requirements are not only included in supplier performance expectations but also embedded in global sourcing events as well as category strategy development. Included are requirements and best practices focused on supply chain sustainability, human and labor rights, and supply transparency in order to ensure security of supply, mitigate risk, and achieve our responsible sourcing commitments. Further, Kellogg employee performance evaluation is linked to achievement and execution of these commitments across various departments, including procurement.

In addition to monitoring our supply chain, we also recognize suppliers who have gone above and beyond to help champion Kellogg's responsible sourcing commitments. This year our Kellogg North America Procurement team awarded both Graphic Packaging International and Star of the West with our Supplier Sustainability Partnership award for their work in Packaging and Ingredients. Both companies have been instrumental in their efforts to collaborate and proactively seek out ways to support initiatives and programs related to Kellogg's 2020 Sustainability Commitments.

### **Human Rights**

In December of 2016, in recognition of the United Nations Guiding Principles, the Universal Declaration of Human Rights, the standards and conventions set forth by the ILO, [the UN Global Compact](#), and the OECD Guidelines for Multinational Enterprises, we published our [Human Rights Position Statement](#) outlining our commitments to protect and advance the cause of human rights throughout our operations and value chain. In June of 2016, in accordance with the UK Modern Slavery Act, we shared our [Policy Statement Prohibiting Involuntary Labor](#). Both documents reflect public declarations that



support and reference the work that we are undertaking both internally and externally. As we work with our industry partners, our suppliers, and stakeholders we will continue to evolve in this space as we seek to advance our commitments to respect and protect the rights of those affected both directly and indirectly by our operations.

Our commitment to the advancement and respect of human rights begins at the top of our organization. Our policies are reviewed and approved by both our CEO and Board of Directors. Procurement leadership and category managers are responsible for execution of the Global Sustainability Commitments, including social accountability, which is reflected in their annual performance plans and annual incentives. At the Board level the Social Responsibility & Public Policy Committee oversees the company's human rights work. All four committee members are independent and meet bi-annually. At the executive level, human rights and environmental issues related to our supply chain activities are overseen by the Chief Sustainability Officer, who reports to the Vice President of Global Communications, Philanthropy, and Sustainability. This group meets quarterly. We have also convened a cross-functional team comprised of representatives from Sustainability, Communications, Human Resources, Procurement, EHS, and Legal that meets monthly to assess and track our global activities and inform policy and strategy regarding human rights. Each group is involved in decisions related to salient industry issues such as child labor, forced labor, freedom of association and collective bargaining, health and safety, land rights, water and sanitation, and women's rights. These issues are managed collaboratively at the day to day working level by our Sustainability, Procurement, Legal, Human Resources, Supply Chain, and Ethics and Compliance functions. Each group is involved in various capacities and have different aspects of responsibility.

This year we have also taken steps to continue to expand our human rights issues monitoring and compliance verification processes both internally and externally to build upon our current systems and further integrate human rights considerations into our business decisions.

Externally, our [Global Supplier Code of Conduct](#) is the foundation upon which we build our supplier relationships. It is communicated to potential suppliers during Kellogg Strategic Sourcing events, the initial supplier engagement process, by our procurement Category Managers to ensure that they are aware of our expectations and standards. It is also part of our standard Terms and Conditions within all contracts. We believe in partnering with our suppliers to share best practices and support their responsible sourcing journey. We will work with them to help identify and improve areas that are found to be non-compliant or not in line with our expectations by sharing relevant training materials and by hosting in person meetings such as our annual Supplier Days event. However, if a supplier is unable or unwilling to comply with the Code we will not do business with them. As stated within the Code, we reserve the right to terminate any agreement or business relationship in which a supplier does not comply. We have exercised this right with past relationships, most recently regarding human rights violations uncovered in the [palm oil sector](#).

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In addition to communicating our Code and expectations to suppliers during our Kellogg Sourcing Events we have also integrated Verisk Maplecroft risk ratings into our overall risk management process for category strategy exercises and purchasing decisions. Human Rights issues such as child labor, forced labor, freedom of association and collective bargaining, health and safety, land rights, water and sanitation, and women's rights are assessed before and during supplier engagements and contract negotiations or renewal. Category Managers assess feedback and information from suppliers to align with cross-functional stakeholders in Sustainability, Social Accountability, Quality, RQNT, and Supply Operations. Each function has the opportunity to weigh in on any concerns or may request that the supplier provide additional information for follow up and clarity. Suppliers with operations in countries determined to have high risk potential are asked to provide additional details regarding their policies and processes for managing Responsible Sourcing risks. This includes providing available third-party audits of facilities, relevant training materials, forced labor monitoring activities, and visibility to their lower tier operations such as the level of traceability to the mill and farm level. Procurement leadership and category managers are responsible for execution of the Global Sustainability Commitments, including social accountability, which is reflected in their annual performance plans and annual incentives.

We also ask that our suppliers register with the online management platform Sedex. In conjunction with the global risk analytics company Verisk Maplecroft, Sedex uses hundreds of human rights risk indices to determine specific levels of inherent risk. Risk factors include regional location of operations, sector or commodity, degree of salience to industry identified issues, and supplier specific information. Targeted facilities are asked to complete a robust self-assessment detailing policies and cross-functional procedures related to labor practices in an effort to identify management system gaps that could indicate the possibility of or potential for human rights abuses or nonconformance. To drive transparency and visibility within our multi-tiered global network we are mapping direct suppliers comprising our Top 80% Spend by region to assess the possible presence of forced labor and other human rights risk potential. In addition, facilities operating in high risk areas or commodities are being requested to conduct a third-party SMETA 4 Pillar audit to evaluate any potential system or policy gaps. Expectations regarding both of these actions have been incorporated into our bi-annual supplier performance scorecards metrics and reviews. Should a critical violation be uncovered during any of these processes Kellogg has a Critical Response Action Plan to alert senior executives and assess plans for immediate remediation of the issue(s). These are reviewed on a case by case basis and next steps executed



accordingly relevant to risk to affected people, communities, and business operations. Non-critical violations are managed through the supplier and the third-party audit body. Tracking of resolution of these issues is done through Sedex and internal Kellogg systems with the expectation that suppliers complete the Corrective Action Plan requirements agreed to during the audit.

Internally, our manufacturing plants are, or are in the process of, completing and/or updating the Self-Assessment Questionnaire on Sedex to review their own policies and practices and identify any areas with risk potential. We also conduct SMETA 4-Pillar audits on select owned facilities to ensure proper implementation and execution of our internal operating procedures related to human rights.

In addition to compliance monitoring and verification activities we have also sought to cascade our expectations, policies, and increase the level of awareness of human rights issues throughout our organization and supply chain. To ensure that our employees are aware of these we have utilized interactive, immersive online training modules to foster awareness and highlight salient issues. Last year a course focused on the issues surrounding forced and involuntary labor was presented as part of our employee training. Our trainings are shared globally and translated into all relevant languages such as Arabic, Chinese, Dutch, English, French (EU), German, Italian, Japanese, Korean, Portuguese (Brazil), Russian, Spanish (Latin America), Thai, and Polish. We are currently in the process of developing and piloting more detailed training courses with in-depth discussions to increase awareness of human rights issues and how we as a company and individuals can affect positive change throughout our operations.

As our programs evolve we seek to further engage with a wide range of potentially and actually affected stakeholders, including those in the local communities that support our operations throughout the world. In 2017 we will be continuing our work with the Kellogg Grower Survey to reach 1,200 farmers in 21 countries to assess and support climate smart agriculture practices for our priority row crop and fruit ingredients as well as farmer livelihoods. This data we will inform our efforts for advancing the cause of human rights and improved livelihoods in the regions in which we source. Our efforts to engage with and understand the most pressing needs of vulnerable communities and stakeholders will be modeled similarly to our work with smallholder and women farmers ([link](#)) by utilizing the knowledge and expertise of third-parties and those advocating for local groups and populations. We recognize that our efforts should be based on best practices and the proven effective policies and practices of those that are best positioned to understand and communicate them.

We are a company of promise and possibilities. Each day represents a fresh opportunity to share Our Vision, to enrich and delight the world through foods and brands that matter, and live Our Purpose, nourishing families so they can flourish and thrive. By being mindful and committed to our ideals, we uphold our founder's dedication to people and their well-being. We promote an environment where we can push beyond boundaries and across borders to create foods and brands that help to fuel the best in everyone everywhere.

It is this belief that brings us together and sets us apart. That's why across our company and our supply chain, we're working to support the livelihoods of individuals, families and communities that rely on us and on whom we depend. We are on a journey, and we look forward to strengthening our approach to address human rights.

### **Advocacy Initiatives**

#### **Supporting Women and Girls on International Women's Day and beyond**

On International Women's Day 2016, Kellogg Company and TechnoServe announced the expansion of a training program in India and South Africa to improve incomes for thousands of smallholder maize and wheat farmers--particularly women--and enhance their skills in climate-smart agriculture. This builds on Kellogg and TechnoServe's 2014 partnership to map the role of smallholder farmers and women in Kellogg's global supply chain.

The farmer training program with TechnoServe, located in important Kellogg sourcing markets, is a key part of this initiative. Launched in January 2015, the program has already trained nearly 3,500 smallholder farmers, of which almost 40% are women. The new phase will reach roughly 12,000 additional farmers in India through "Centers of Excellence" (last-mile input distribution enterprises), and 400 additional maize farmers in South Africa, with similar percentages of women.



The South Africa program will employ a variety of climate-smart agricultural approaches, building on the improved technology and specialized agronomic training that have helped farmers in the current phase employ more sustainable farming techniques. Farmers in this program are also trained in business management and financial literacy, a particularly important skill set for women, who can then assume greater ownership of income-generating activities. The program has helped shift many of these women from subsistence farming to producing crops for profit for the first time.

On a global level, climate-smart agriculture has emerged as a critical tool in safeguarding both food security and livelihoods of the world's 2.5 billion smallholder farmers. Women, who constitute 43% of the agricultural labor force in developing countries, are particularly vulnerable to climate-induced economic shocks. Kellogg continues to use its voice to advocate for climate smart agriculture programs, especially for women, in many forums including the speaking to congressional staff in March 2016, participating in events like the Business Climate Summit, Global Agribusiness Alliance, United Nations International Women's Day, and as co-leads for the World Business Council for Sustainable Development's work stream on Climate Smart Agriculture.

### **Supporting Women's Rights in India**

Kellogg representatives engaged with Government officials including Commissioner of Industries, Director of factories, Inspector of factories, Principle Secretary for industries and finally the Chief Minister. All of this was to allow women to work in all the shifts so that industries are encouraged to provide greater employment to women in the state. The government now allows women to work on night shifts, benefiting women, the economy and the Kellogg business.



### **Government Advocacy Summary**

Kellogg regularly engages with stakeholders on the important topic of climate change. In addition to customers and suppliers, these stakeholders include Business for Innovative Climate and Energy Policy (BICEP), Consumer Goods Forum (CGF), Global Environmental Management Initiative, CDP, We Mean Business, World Business Council for Sustainable Development (WBCSD), and others. We encourage industry associations and peers to engage in meaningful climate action. We will report on this industry engagement annually.

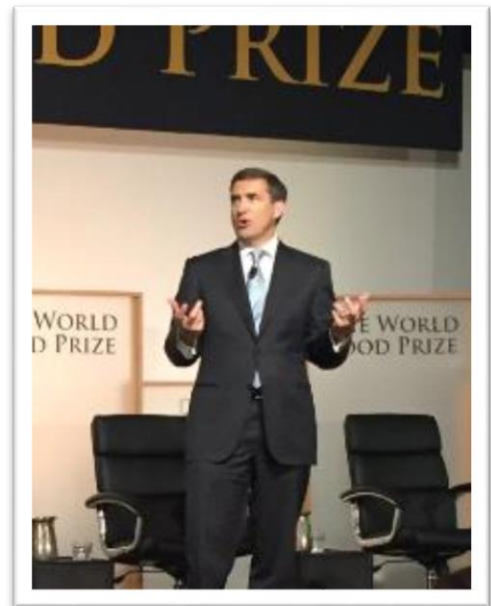
- Since 2014, Kellogg has continued to strengthen our commitment to climate action through various government engagements including President Obama's Climate Data Initiative, the United States Department of Agriculture's Global Open Data for Agriculture and Nutrition initiative, and the White House American Business Act on Climate Pledge.
- We joined Business for Innovative Climate and Energy Policy in 2014 and educate policymakers at the federal and state level on the importance of climate action. To further this voice, Kellogg joined over 300 US businesses in November 2016 in writing an [open letter](#) to the U.S. Government, calling to support the green economy and climate action.

# Kellogg Company

## 2016 Year-End Sustainability Milestones

December 2016

- In 2015 and 2016, Kellogg worked with the U.S. Department of Energy to assess low carbon options for our manufacturing facilities. Additionally, we worked at the state-level in support of efficiency and productivity improvements in our plants.
- Alistair Hirst, Senior Vice President Global Supply Chain, was a key note speaker at the 2016 SEDEX conference held in London during March 2016. He spoke on how to address supply chain volatility in food supply chains, and how it is uniquely critical and how it addresses issues including demographics and political stability to human health and social justice. His speech can be viewed at [https://www.youtube.com/watch?v=q\\_doLZGr4Do&list=PLrXfQVsW-j\\_f1amNTDbScAN8Ut7Hqs6sp&index=1](https://www.youtube.com/watch?v=q_doLZGr4Do&list=PLrXfQVsW-j_f1amNTDbScAN8Ut7Hqs6sp&index=1)
- Diane Holdorf, Chief Sustainability Officer, participated in a May 2016 panel discussion with members from BICEP and legislators to discuss the importance of climate action.
- John Bryant, Kellogg Company Chairman & CEO, co-authored a [Huffington Post op-ed](#) with World Wildlife Fund's Jason Clay and Global FoodBanking Network's Lisa Moon to showcase the need for action on food security. John Bryant spoke the World Food Prize, sharing our company's vision, passion and commitments on food security including our updated Breakfasts for Better Days goals. Alberto Raich, President of Kellogg Mexico, also spoke on this topic in October 2016 at the CIMMYT 50 conference in Mexico City.
- Kellogg Company Chairman and CEO John Bryant joined other food and agriculture sector leaders to launch the CEO Council on Sustainability and Innovation at the Bipartisan Policy Center. Over the last year, the council researched, collected and amplified innovative approaches within the agribusiness industry to combat and adapt to the realities of increasing climate volatility, a growing population, and other threats to a stable food supply. The participating CEOs shared their vision with government and other stakeholders in 2016 through a panel session and published the key findings in this report: <http://cdn.bipartisanpolicy.org/wp-content/uploads/2016/05/BPC-CEO-Council-Sustainability-Innovation.pdf>
- President of Latin America, MariaFernanda Mejia, spoke at the UN Climate Action Summit held in Washington DC during May 2016. She spoke on the issue of Catalyzing Climate Smart Land Use for a Sustainable Future. The Climate Action 2016 multi-stakeholder summit took place two weeks after the signing ceremony of the Paris Agreement, and eight months after the adoption of the Sustainable Development Goals by all the governments of the world, and was an important global



leadership venue for Kellogg to use its leadership voice to address the intersecting issues of food security and climate.

- President of Europe, Chris Hood, spoke at the Business Climate Summit held in London during June 2016. He spoke on the issue of the Role of Business for Achieving Climate-positive Land Use in Agriculture and Forestry. The Business & Climate Summit brought together leaders from business, government and finance to deliver real climate action and a swift transition to the net zero carbon economy. It represented an additional important global advocacy opportunity for Kellogg to use its leadership voice to address the intersecting issues of food security and climate.
- During November 2016's 22<sup>nd</sup> Conference of the Parties (COP22), Kellogg senior executives participated in many events to advocate for climate action and business leadership. On November 16 2016, Diane Holdorf, Kellogg Company Chief Sustainability Officer, announced the achievement of reaching 15,000 smallholders through Kellogg programs on climate smart agriculture.