



Update:

2016 AgWater Challenge

An aerial photograph showing a vast, dense plantation of palm trees stretching across the landscape. In the background, there are rolling hills and mountains under a cloudy sky. The text is overlaid on the right side of the image.

Agriculture
accounts for
70%
of the world's
freshwater
usage

Global warming, population growth, and pollution are threatening water sources worldwide, creating clear challenges for sustainability professionals in the food and beverage industry. Agriculture accounts for 70% of the world's freshwater usage. And a third of the world's food is grown in areas of high water stress or competition. The risks are great for the environment, the communities where food and beverage businesses operate, and the economy.

The data paints an unsettling picture of the future for global freshwater resources:

- **40% of water demand is unlikely to be met by 2030**, triggering the possibility of potentially devastating consequences, such as food scarcity and other environmental threats, according to a recent U.N. report.
- The World Economic Forum cited **water scarcity as the number one environmental threat** in its 2015 global risk report.
- 68% of companies believe that exposure to water risk could generate a substantive change in their business, operations, or revenue, according to a 2014 Carbon Disclosure Project (CDP) report. The CDP estimates that a **water supply shortfall represents \$63 trillion in risk to businesses and communities by 2030.**

Not surprisingly, agricultural sustainability standards are gaining strength as a key mechanism through which large multinational firms address their broad corporate sustainability goals. Investors and consumers are encouraging food and beverage companies to become more fully engaged in addressing these challenges. Today, smart companies realize that strengthening their approaches to water stewardship, particularly within their supply chain, is good for the environment—and their bottom lines.



"It's absolutely critical that you have the right level of senior sponsorship behind your targets."

— Joe Maguire, Head of Sustainable Sourcing, Diageo



WWF and Ceres Launch AgWater Challenge

IN OCTOBER 2016, Ceres and the World Wildlife Fund joined forces to launch the AgWater Challenge, a collaborative initiative formed to help companies in the food and beverage industry reduce water risks in their supply chains and their impacts on local watersheds. Representing \$123 billion in annual net revenue, some of the world's most influential companies in the industry signed this groundbreaking partnership, through which they agreed to make time-bound and measurable commitments to:

- **Reduce** the water impacts associated with key agricultural commodities;
- **Implement** locally relevant strategies to mitigate risk in agricultural sourcing areas with water scarcity and water quality concerns; and
- **Support** and incentivize farmers and other agricultural producers to strengthen water stewardship.

The AgWater Challenge sought out companies that were leaders in water stewardship, as well as those that made new or improved commitments. The initiative was particularly focused on companies that aspired to set stronger, more transparent targets around agricultural supply chains—those that understood the financial impact that water risks pose to their businesses.

In the first year, each company's journey was unique and offered varying challenges and opportunities.

At kickoff, some companies were in the initial stages of assessing their specific water risks. Others joined the Challenge having largely already identified water risks and mapped them. Many had taken steps to ensure a corporate commitment to long-term continuous improvement. The majority of companies gained strong traction over the first year in their risk assessment efforts and in their plans for ensuring continuous long-term improvement.

Several companies successfully leveraged connections in the communities where they operate to create partnerships to advocate for policies to support their water sustainability work. This was a key area of movement and success for many AgWater participants.

One area of opportunity across the board was in companies' public **disclosure of their water stewardship goals and initiatives**. The AgWater Challenge provided the impetus for AgWater companies to move forward with this important task. Many companies also made progress in developing policies that promote sustainable agriculture and address water risk.

For many companies, **internal resourcing proved to be a recurring challenge**. For almost all, the importance of gaining upper management support for the initiative and for acquiring resources became clear from the start.

Maintaining buy-in of senior management will continue to be a crucial factor for these companies as they forge ahead in pursuit of their long-term AgWater Challenge goals.

"It's absolutely critical that you have the right level of senior sponsorship behind your targets," explained Joe Maguire, head of sustainable sourcing at Diageo. "You've got to be certain that the business case is very clear within the organization, and that it makes sound financial sense for the company, or it will not last over the long term."

Starting Line-Up

Seven companies comprised the inaugural AgWater Challenge team. They committed to working with thousands of growers in their global supply chains to reduce water and pollution impacts. Their commitments reflected their leadership and their understanding that, as major global food brands, they can be a powerful and constructive force for scaling water stewardship, especially at the farm level—where the biggest footprint is, by far.

The companies' individual goals were publicly announced through a coordinated communications and media outreach campaign. The following is a sampling of commitments celebrated or created through the AgWater Challenge.

1

Diageo committed to developing sustainable agricultural supplies of six raw materials by 2020 to cover 90% of raw materials purchased by establishing partnerships with farmers. In addition, it aimed to source 80% of its raw materials locally in Africa by 2020, and to equip suppliers with tools to protect water resources in the most water-stressed locations.

90% **raw materials sustainably supplied**
80% **sourced locally**

4

Kellogg made a high-impact commitment to responsibly source its global 10 priority ingredients by 2020 through continuous improvement for row crops via water and fertilizer use metrics. The company's water sustainability efforts are supporting over 70 agricultural suppliers and millers, and 1700 farmers across 22 countries, helping them optimize water use and enhance watershed quality.

10 **priority ingredients responsibly sourced**

5

PepsiCo committed to working with its agricultural suppliers to improve water efficiency within its supply chain by 15% by 2025 (using a 2015 baseline) in high-water-risk sourcing areas, with a specific focus on India and Mexico. PepsiCo's AgWater Challenge goals cover all of the company's major crops, including those that it directly sources, such as potatoes, corn, oats, and citrus, as well as other key commodities, including both those directly contracted and those indirectly procured.

15% **improvement in water efficiency in agriculture supply chain**

2

General Mills completed a comprehensive risk assessment through which it identified eight high-risk watershed regions globally, including California. It pledged to develop water stewardship plans for these regions by 2025 by working with NGOs, farmers, and other stakeholders.

8 high-risk watershed regions identified

3

Hormel Foods' plans include development of a comprehensive water stewardship policy with management expectations that surpass regulatory compliance for its major suppliers, contract animal growers, and growers that supply animal feed. The company committed to establishing time-bound goals aimed at improving water quality in high-water-risk regions.

Policy will surpass regulatory compliance

6

Danone North America (formerly WhiteWave) set an aggressive goal to develop a time-bound road map for agricultural water stewardship over a 24-month period. The road map will address common water challenges facing the organization's key commodities in areas of greatest risk. The company also pledged to engage in public advocacy to strengthen water management in high-water-risk priority sourcing regions.

24-month, aggressive road map

7

Hain Celestial set 2025 goals to work with protein suppliers and feed grain farmers to reduce the water and climate impacts of its feed supply and to implement responsible nutrient management practices, as well as incentivize ingredient suppliers to plant cover crops that would restore soil health and reduce water quality impacts.

2025 goals to reduce water impacts





The AgWater Challenge Recipe

Indicators from Ceres' "Feeding Ourselves Thirsty" ranking, which evaluated publicly available information on the water use, stewardship, and policies of 35+ major food sector companies in four industries, formed the foundation of the AgWater Challenge. Existing water stewardship resources and benchmarks were used to strengthen and refine the set of criteria to help assess and drive corporate action and commitments likely to have the greatest positive impact on field-level water stewardship and on watershed sustainability more broadly.

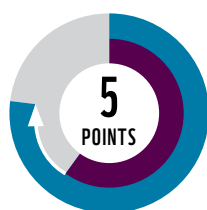
Five Key Stewardship Ingredients were identified and used to evaluate and guide companies through the Challenge. They are detailed on the following pages, along with some highlights of how some companies rose to meet each in this first year.

5 KEY INGREDIENTS OF AgWATER STEWARDSHIP



Ingredient #1:

Assess Water Risks in Key Agricultural Sourcing Regions (GMI, Hormel)



60% Before the Challenge

77% After the Challenge

17% Improvement

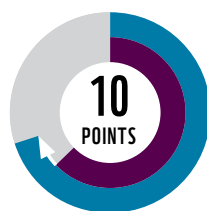
Agricultural supply chains are often complex. Risk assessments play a key role in helping companies **identify which major agricultural inputs and sourcing regions are most exposed to water-related risks** such as water scarcity, fertilizer runoff, and climate change. These assessments can be time-consuming; however, once companies have a clear understanding of their risk profiles, they can then develop more effective responses to them.

- **General Mills** employs a four-phase approach to sustainable supply chain water use. Assessment is the first step in the process, and it includes a detailed study of key operation and growing region watersheds to identify priority areas.
- **Hormel** employs a three-tiered approach to its annual water risk assessment, which includes detailed supplier questionnaires. Company leaders recently invested in a software assessment tool that enabled them to identify the top 10 suppliers and water risks.



Ingredient #2:

Set Sustainable Agriculture Policies that Address Water Risks



63% Before the Challenge

70% After the Challenge

7% Improvement

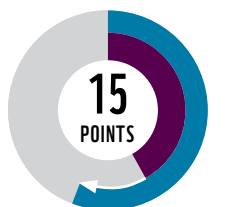
Strong corporate **policies supported by upper management** outline expectations and aspirations for company sustainability performance and provide clear definitions for key terms such as “sustainable sourcing” and “water stewardship.” Effective, clear standards should **outline key performance indicators** for procurement staff and set fundamental requirements for suppliers and producers.

- Water is an essential part of **Diageo's** production process and is used widely throughout its supply chain. One example is the company's four-pillar “Water Blueprint” strategy. The Water Blueprint is defined as a “strategic approach to water stewardship ... an integrated approach based on four areas where we will increase our efforts—in the sourcing of raw materials, in our own operations, within the communities in which we operate, and through local and global advocacy for best practices stewardship.” A critical focus of this strategy is the agricultural supply chain in water-stressed markets.

- **PepsiCo** is working with WWF to build a theory of change for its entire water stewardship program that will allow the company to more systematically understand the impact their efforts are having and where they need to make adjustments. Acknowledging the challenges they faced gathering data and understanding quantitatively the impact Pepsi has across hundreds of thousands of farmers informed a new approach.
- Over the past year, **Kellogg** has focused efforts on taking its data analysis one step further and building relationships with its suppliers to increase understanding and capacity. “Recognizing that water is particularly challenging, we are encouraging farmers to be on that journey with us so that they understand what we’re asking, the ways we are calculating the information, and the importance of working together to achieve these goals,” explained Amy Braun, sustainability director.



Ingredient #3: Set Time-Bound Goals to Reduce Water Impacts of Key Crops



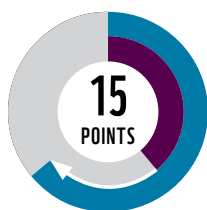
42% Before the
Challenge

56% After the
Challenge

14% Improvement

Sustainable sourcing goals should **cover ALL key agricultural inputs** and include definitions that highlight water-related criteria and encourage better water stewardship as a way to drive continuous improvement in major commodity supply chains.

- **PepsiCo** has seven individual water-related Performance with Purpose targets within its broad corporate sustainability report. Advocating for strong water governance in local watersheds is one of the most important of these goals and one with the most potential for long-term lasting impact.
- **Kellogg** committed to responsibly sourcing its global 10 priority ingredients by 2020 by measuring continuous improvement for row crops through metrics focused on water, fertilizer use, and other factors aligned with industry standards and measurement tools. The company has devoted considerable resources to support this goal, with one employee focused specifically on managing data around where they are doing the work, how many farmers they are reaching, and within which watersheds.



39% Before the Challenge

64% After the Challenge

25% Improvement



Ingredient #4:

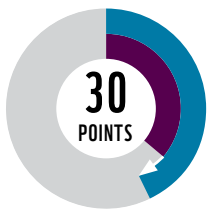
Collaborate at the Watershed Level to Protect Resources in High-Risk Areas

When there is **water scarcity and poor water quality in a watershed**, everyone is at risk: farmers, businesses, and communities alike. Mitigating water risks inside a company's own factory walls is critical, but poor management of collective water resources by other water users can render the impact useless. Food and beverage companies must play a role in developing and executing holistic corporate solutions to water challenges, including **supporting public policies that lead to more sustainable water management**.

- As part of their goal to achieve watershed health by 2050 in priority basins, **General Mills** took the following actions:
 - Set a goal to develop water stewardship plans by 2025 in their priority watersheds.
 - Leveraged the General Mills Foundation to address agriculture water risk by supporting farmers in California on projects such as on-farm recharge pilot research and expansion.
 - Completed with The Nature Conservancy an in-depth comprehensive analysis of watershed risk in India. Additionally, they hope to leverage lessons learned in Idaho to address irrigation inefficiencies for wheat farmers.
- **Danone North America's** AgWater goals included a commitment to policy advocacy to strengthen water management in priority sourcing regions through several avenues:
 - partnering on webinars and calls with the Business for Water Stewardship
 - supporting water policy improvements in California, including through Ceres' Connect the Drops platform
 - engaging in business advocacy opportunities in the Colorado Water Basin
 - creating an internal platform for gathering ideas for Danone North America's company stewardship needs.



Ingredient #5: Support Farmers to Steward Water Resources



36% Before the Challenge

43% After the Challenge

8% Improvement

Many farmers lack information, training, or financial incentives that may be needed to adjust their farming practices in ways that reduce water risks and impacts. Corporate buyers play a critical role—both directly and in partnership with supply chain partners, NGOs, government, and academia—in channeling appropriate **educational resources and financial incentives** to growers that improve on-farm practices and mitigate their own risks.

- **PepsiCo's** Sustainable Farming Initiative (SFI) is the foundation of its agricultural agenda and the framework for managing the holistic farming and landscape environment. PepsiCo has over 90% engagement with the SFI across its global supply chain on its direct crops. The company has attained strong global visibility on these crops and farming communities and has a mechanism to manage efficiencies there.
- **Diageo** has farmer support programs in place to help smallholders incorporate lessons learned from other regions where engagement programs are already in place and working successfully.
- **Diageo** recently announced a £100 million investment in a new brewery in Western Kenya, which will support up to 10,000 smallholder sorghum farmers. This was done in partnership with the Kenyan government and has a significant positive impact on local economic development. As an input, sorghum is more drought-resistant than other crops, such as barley, and offers a sustainable yield from otherwise unproductive land, especially in water-stressed areas. The project aims to provide small-scale farmers, particularly in dry and marginal regions, with the tools they need to produce sorghum sustainably.



AgWater Progress: Summarized

DURING THE CHALLENGE, the ability to dialogue with water stewardship experts from WWF and Ceres led to better company understanding of each key ingredient's role in achieving stronger agriculture water stewardship. Dialogue was a two-way street. Companies also provided ideas and shared barriers toward addressing various elements within each ingredient. Out of this process, participants became more aware of their baseline, had a chance to brainstorm potential solutions with peers and experts, and were recognized for their progress or leadership.

We found good traction with our first two ingredients—water risk assessment and setting strong sourcing policies that address water risks. Our initial AgWater cohort had either taken good steps toward creating these enabling conditions for more advanced action or used the Challenge to make commitments in these areas as their first steps toward more meaningful AgWater stewardship. Further, we also saw companies set new commitments through the Challenge to set time-bound goals and watershed-level collaboration. **However, empowering and supporting growers—one of the most important ingredients in**



terms of delivering change on the ground—remained a tough category in terms of new commitments. With a year of lessons learned (see following pages) under their belt, Ceres and WWF are inviting other food and beverage companies to join the AgWater Challenge and embrace water stewardship beyond their four walls, deep into their supply chains. Forward-thinking companies realize that the time has come for the sector as a whole to address the risks facing freshwater, the precious resource upon which all agricultural supply chains hinge.

For information on becoming
an AgWater Steward, contact
Lindsay Bass at Lindsay.Bass@WWFUS.org.

Lessons Learned

ONE YEAR AFTER the first AgWater Challenge, participating companies reflected on lessons learned. AgWater Stewards PepsiCo and Diageo offered specific insight on lessons learned for companies starting out on their water stewardship journeys.



Lesson #1:

Take a Holistic Approach to Water Risk

The global food and beverage company PepsiCo understands the importance of taking a holistic perspective of water-related risk within its supply chain. When developing their global water strategy, PepsiCo's team looked across the company's direct and indirect water use. Their detailed, comprehensive assessment process gave them an understanding of where they faced high water risk and a targeted view of local watersheds. The result was the realization that, in addition to quantitative targets on water use efficiency, wastewater quality, WASH, and watershed replenishment, the heart of the water strategy needed to be a goal to advocate for strong water governance in local watersheds. Even though this goal is qualitative, it's the centerpiece of PepsiCo's program and the launching point for much of what the company seeks to accomplish on water stewardship. PepsiCo's senior management team supported these efforts, which was critical as they staffed the team, including a specialist focused specifically on advocacy efforts.

Explained Roberta Barbieri, vice president, global water and environmental solutions at PepsiCo: "We identified a sweet spot for advocacy efforts—geographies where all three water risks converge: high-risk company-owned operations, franchise bottlers or snack operations, and agricultural sourcing areas."



Related AgWater ingredient: Go in at the watershed level to work with local partners and stakeholders to try to work on and adjust policies, regulations, and practices that are driving water insecurity.



Lesson #2: Large-Scale Assessment Requires Flexible Approach

PepsiCo anchors its agricultural agenda behind the Sustainable Farming Initiative (SFI), a program to assess and support positive economic, social, and environmental outcomes on farms where it directly sources agricultural products. PepsiCo has gained visibility to risks across their agricultural supply chain by implementing the SFI across 33 countries with active programs representing more than 35,000 growers. Securing a quantitative assessment around the impact of their work when deploying it across this number of farmers proved challenging. To address the issue, they relied upon a combination of two approaches—a qualitative assessment and a theory-of-change impact assessment. The theory-of-change assessment will allow PepsiCo to systematically understand the impact of their efforts, while the qualitative assessment identifies where opportunities for positive impact exist.



Related AgWater ingredient: Assess water risks in key agricultural sourcing regions.



Lesson #3: Building the Business Case Is a Key to Success

Diageo's water strategy includes a focus on its agricultural supply chain in water-stressed markets. One of Diageo's most important AgWater successes to date was achieving a better understanding of and convening a coalition around the value of providing access to clean water and sanitation in its agricultural growing areas in Africa.

"We are working collaboratively with the UNICEF-led WASH4Work initiative to demonstrate in compelling, simple financial language why a company should be investing in providing access to clean water and sanitation in the agricultural and manufacturing supply chain," explained Michael Alexander, Diageo head of water, environment, agriculture sustainability.



Related AgWater ingredient: Collaborate at the watershed level to protect resources in high-risk areas.



Lesson #4:

Relationships Come First

Earlier this year, Diageo launched a pilot project in Tanzania to develop a series of modules to help smallholder farmers manage water more effectively. The project was a collaborative effort with Water Witness International and German agency GIZ and resulted in an Alliance for Water Stewardship assessment of a brewery supply chain there.

Diageo confirmed that although smallholder farmers had clear water risks to deal with, Diageo couldn't approach them with an agenda focused solely around water.

"We learned the importance of understanding their total risk profile before speaking to them, because farmers have many inter-related sustainability challenges: social issues, access to water, health, and human and land rights challenges," explained Michael Alexander. "We have to view water holistically; the discussion must be integrated into a broader sustainability farm assessment."



Related AgWater ingredient: Support farmers to steward water resources.

Stay tuned for more lessons learned as the AgWater Challenge moves into its second year and additional companies join the movement to reduce water risk in their supply chains and within their watersheds.



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