An Ongoing Water Crisis

The world’s water crisis is one of the most serious risks facing society and a key material risk for businesses. Population growth, pollution, and climate change are just a few of the forces that increasingly threaten water availability and water quality.

The $5 trillion global food and agribusiness sector, because it uses 70% of the world’s freshwater supply, operates at the center of this concern. Food and beverage companies can and must play a powerful role in protecting water supplies. They are highly dependent on large volumes of cheap water, and will be among the first to feel the impacts of water risk as rising average global temperatures and shifting weather patterns make fresh water scarcer and agricultural production more volatile. Because water is critical to business operations — from agricultural fields and manufacturing facilities to consumers of the end product — water stewardship is central to achieving long-term business growth.

A recent Morgan Stanley Capital International All Country World Index (MSCI ACWI) analysis of food companies found that $415 billion in revenue
might be at risk from lack of water availability for irrigation or animal consumption. Another $248 billion could be at risk from changing precipitation patterns affecting current crop production areas.

Similarly, in its Global Risks Report 2020, The World Economic Forum ranked water crises as among the Top 10 global risks in terms of both impact and likelihood. Food companies should consider whether water-related issues will drive major shifts in the agricultural production system, and examine the role agriculture plays in threatening water security.

Agriculture is rapidly draining aquifers in many regions of the world and seriously impacting water quality. In fact, meat production is one of the biggest polluters of watersheds globally. In the U.S., both drought and flooding reached historic proportions in 2019, and hypoxic “dead zones,” which now form annually at the mouths of watersheds critical to crop production are reaching record sizes.

Fortunately, as water risks mount, some companies are becoming more water-aware. Of the 35 publicly-traded companies evaluated in a recent Ceres report, Feeding Ourselves Thirsty, 91% cite water and/or climate change as a risk in their annual financial statements, up from 69% in 2016. The report also found that currently a third of the companies analyzed charge boards and senior executives with overseeing and managing water risks, up from just 8% of companies in 2015. Additionally, the analysis found that nearly all companies – 90% – have set water-use efficiency targets for their operations. The report also found that more companies now assess water risks not only to their facilities, but also to their agricultural supply chains. Since 2015, the proportion of companies assessing water risks to both their own facilities and their supply chains has jumped from 35% to 67%.

Despite these improvements, the sector has seen limited progress on other critical issues. The Feeding Ourselves Thirsty analysis also shows that 37% of companies still lack sustainable-sourcing goals for any of their key agricultural inputs — and that existing goals often lack clear definitions, implementation plans, and measurements of progress. The majority of companies do not yet formally align procurement policies with sustainable-sourcing commitments. Finally, while the analysis found that more than two-thirds of companies now conduct water-risk assessments for their agricultural supply chains, many assessments still fail to account for risks other than water scarcity, such as agricultural runoff, impaired ecosystems, regulatory risks, and the concerns of local stakeholders. CDP's Global Water Report also shows that even though there has been some notable progress, only a few companies are showing leadership. Water-related financial losses reaching upwards of $36 billion annually highlight the urgent need for companies to enhance the resilience of their supply chains.
In response to the water-related risks that food and beverage companies face, Ceres and the World Wildlife Fund (WWF) created the AgWater Challenge in 2016 as a collaborative effort to inspire meaningful action to address water risks in agricultural supply chains and their impacts on local watersheds. Representing over $123 billion in annual net revenue, leading companies collectively made more than 25 transparent commitments related to strengthening water stewardship within their agricultural supply chains.

The current cohort of AgWater stewards includes original participants from the 2016 Challenge: Danone North America, Diageo, General Mills, Hormel Foods, Kellogg Company, and PepsiCo. Archer Daniels Midland (ADM), the first agriculture products company, and Target, the first retailer, joined the cohort in 2018, and Driscoll's, the world's largest berry company, joined in 2019.

Unfortunately, soon after Hain Celestial Group joined the AgWater Challenge, staff changes led to its not pursuing commitments and the company left the Challenge. In another important development, Danone SA purchased The White Wave Foods Company, also part of the original group of Challenge participants, forming Danone North America and continuing forward as a current participant.

Companies joining the AgWater Challenge engaged in regular dialogue with Ceres and WWF (as well as other NGO partners) as they analyzed water issues within their supply chains and refined or made new sourcing commitments to better address their risk and impacts. Participating companies also benefited from opportunities for peer-to-peer learning on best practices for managing water risks, setting time-bound goals, and engaging with farmers to further their commitments.
Commitment Progress

Through interviews with the Challenge participants, we found inspiring examples of progress and forward-thinking action. We also gained insight into challenges to progress on commitments and related water stewardship. The following table presents a summary of each company’s commitment and highlights progress made through 2019. Additional details of the original commitments made are available on the AgWater Challenge website and on each individual company's website.

While more remains to be done, challenge participants in general are moving in the right direction and evolving their work with lessons learned along the journey. Many are taking steps to think more systematically about the link between climate change and water, and are developing programs that address water variability and quality by promoting healthier soil. In addition, AgWater stewards have a general trend of working closely with their agricultural suppliers and other business partners to ensure their efforts are farmer-centric. Many provide a range of incentives to promote farmers' adoption of more sustainable agricultural practices.

Commitment progress updates as of January 2020
“ADM is proud to be a part of the AgWater Challenge and of the progress we continue to make towards our goals. Through the various sustainable agriculture projects we’ve implemented as part of the Challenge, we’ve seen the capacity of the entire ag supply chain pull together and implement lasting, effective, and impactful change.”

— Alison Taylor, Vice President and Chief Sustainability Officer
Committed to:

**SET A 2022 TARGET** of sourcing at least 10% of its U.S. wheat from farmers measuring and monitoring their environmental footprint.

**INCENTIVIZE GROWER PARTICIPATION** in the S.T.A.R. program (focused on reducing nutrient loss in Illinois).

**ASSIST FARMERS** with direct and indirect financial support.

Highlights of progress through 2019:

**Wheat sourcing target**
ADM increased wheat sourcing from growers that measure their footprint by establishing additional projects through the Field to Market program. These growers cover 8% of its U.S. wheat processing volume.

ADM commitments now also include a time-bound goal: by 2025, it is targeting a 25% increase in acres using cover crops, and a 25% increase in acres using alternative tilling practices designed to reduce run-off.

**Grower participation in S.T.A.R. program**
The company has far exceeded its goal of 50 Illinois farmers filling out the S.T.A.R. survey (180 growers participated in 2018); 87% of the fields participating received three out of five stars.

**Direct and indirect financial support for growers**
ADM is providing support and incentives to farmers in acknowledgment of the extra time it takes to adopt new processes or practices. These offerings include price premium incentives (that step down over time); partnering with Agrible (a system that provides farmers with a feedback report on their performance); and through ADM Cares, grants to local Soil and Water Conservation Districts. These WCD grants can be used for farmer education/outreach events and to support farmers transitioning to sustainable methods, e.g., for cover crop seed, buffer zones, etc.
“Water is a critical natural resource for our business and the world. At Danone North America, we are on a continuous learning and improvement journey, striving to make a meaningful difference by protecting and restoring our natural water cycles. Our efforts not only address water in agriculture and in our operations, but also assess ways in which we can improve our business models to increase efficiencies and lower costs throughout the farming supply chain. Currently, our regenerative agriculture work is creating new projects and awareness across our North America milk supply chain. Through our partner EcoPractices, we have for example, been working with our farmers on over 50,000 acres to track water use and agricultural runoff, and identify projects for soil health improvements. And this year, we are expanding our programs beyond milk to other commodities, including almonds and soy.”

— Deanna Bratter, Senior Director, Public Benefit and Sustainable Development

Danone North America (formerly WhiteWave Foods)

Committed to:

**DEVELOP A TIME-BOUND ROADMAP** for agricultural water stewardship over a 24-month period. The roadmap aims to address common water challenges facing the organization’s key commodities in areas of greatest risk.

Highlights of progress through 2019:

**Time-bound roadmap for agricultural water stewardship**

Danone’s commitment to address agricultural water risks remains firmly in place. The company is working to develop a global water policy that will be watershed-specific, and a time-bound roadmap tailored to implement crop-specific programs (e.g., for dairy, soy, and almonds). It will include indicators that address water quality and quantity.
SUPPORT AND SCALE PROJECTS THAT RESTORE FRESHWATER SYSTEMS in areas material to supply chains, such as on-farm groundwater recharge projects for almond farmers in California, and investments in technologies that improve water efficiency and nutrient application in dairy production.

Sustainable sourcing and support to scale projects to restore freshwater systems
Globally, Danone has committed in its new 2030 goals to amplify its water stewardship work by contributing to soil health through the promotion of regenerative agricultural practices. Specifically, Danone North America aims to help its farmer partners transition to regenerative agriculture through a collaboration with financial services firm Replant Capital. Replant Capital will invest up to $20 million to support Danone North America’s farmer partner expenses related to converting to regenerative or organic farming practices.

Through our EcoPractices partnership Danone measures impact through benchmarking and tracking of progress at the farm level through soil and a variety of KPIs. This directly and transparently connects investments to impacts.

Additionally, Danone North America is working with National Fish & Wildlife Foundation to implement USDA conservation programs across key parts of the dairy supply chain to measure cropland impact. Programs include EQIP at the state level and a Conservation Innovation Grant for a multi-state approach.

In 2018 and 2019, Danone North America balanced its manufacturing and operational water use by supporting 15 projects across 10 states that restored over 2 billion gallons each year (over 4 billion 2018-2019). In 2018, the organization, in partnership with nonprofit Bonneville Environmental Foundation (BEF), also directly contributed to on-farm recharge projects and dairy drip irrigation efficiency projects in California.

Public policy advocacy
Danone North America is a member of Ceres Connect the Drops initiative in California. The company plans to increase its policy advocacy work focused on state and federal policies.

Danone North America is also advocating for improved federal implementation of USDA programs to improve application and measurement of key agricultural practices. Advocacy will at times be coordinated with Ceres and others such as the Sustainable Food Policy Alliance.

ENGAGE IN PUBLIC POLICY ADVOCACY to strengthen water management in high water-risk priority sourcing regions.
“Our approach to sustainably sourcing raw materials, which importantly includes a requirement to sustainable water stewardship, has focused on establishing and communicating the standards we expect of our supply chain partners and working with them to implement and meet these standards. It was critical we embark on that journey ourselves by ensuring that we meet these same standards to better support our suppliers and to demonstrate through leadership. We are very pleased to have achieved FSA 100% Gold for our own agave production in Mexico. Looking forward, we will continue to work with industry bodies to integrate good water management and sustainable agriculture best practices, encouraging adoption and implementation of sustainable agriculture standards and a robust and consistent support model, particularly for smallholder farmers. Underpinning all will be refreshed targets for 2030 aligned with the SDGs.”

— Michael Alexander, Global Head of Environment Sustainability
Committed to:

**CREATE A SUSTAINABLE AGRICULTURE POLICY** that includes water indicators.

By establishing partnerships with farmers, **DEVELOP SUSTAINABLE AGRICULTURAL SUPPLIES** for six raw materials by 2020 to cover 90% of raw materials purchased.

**ENSURE SUSTAINABLE WATER STEWARDSHIP ON 100% OF OWNED AGRICULTURAL LAND BY 2020.** In addition, aim to equip suppliers with tools to protect water resources in the most water-stressed locations of seven African countries.

Highlights of progress through 2019:

**Sustainable agriculture policy**

In June 2018, Diageo updated its Sustainable Agriculture Guidelines (SAG), which are aligned with SAI Platform’s Farm Sustainability Assessment (FSA) tool for assessing on-farm sustainability. The FSA helps minimize the burden of compliance on suppliers so they can instead focus on making improvements in farming practices. Diageo is part of an SAI Platform steering committee that is revising the FSA. The new version is due for release in Spring 2021, which will see improvement to both the question set and the accompanying metrics, including water indicators. Diageo’s SAG will be aligned to this improved standard.

**Sustainable agricultural supplies of six raw materials**

The company is currently developing its 2030 ambition for agriculture, which will align with its SAG to establish a roadmap for sustainably sourcing our raw materials for Established and Emerging suppliers in line with the revised FSA and with Regenerative Agriculture principles. Diageo will continue to partner with farmers in Africa and other emerging economies to deliver social, economic, and environmental benefit to Diageo and local communities.

The company supports approximately 80,000 farmers in Africa and is equipping suppliers with tools to enhance water stewardship through a variety of means, including providing access to capital through micro-loans; supporting farmers’ groups; and encouraging sustainable practices that protect natural resources.

**Sustainable water stewardship on owned agricultural land**

Diageo-owned land is mostly limited to agave production in Mexico, where sustainable water stewardship has been achieved through the implementation of SAI Platform’s FSA. FSA 100% Gold verification was achieved in June 2019.
“Participation in the Challenge has pushed our organization to strengthen, stretch, and enrich our original water stewardship work. As a result of dialogue with our AgWater Challenge cohort, community, customers, and other stakeholders, we are taking a more active role in developing public regulatory efforts and are leading by example, beginning with setting ambitious internal goals. The long-term health of our business and the communities in which we operate is dependent on sustainable water resources. Our commitments take us more strongly towards these common goals.”

— Soren Bjorn, President of Driscoll’s of the Americas
Driscoll’s

Committed to:

**DEVELOP A WATER POLICY FRAMEWORK BY THE END OF 2020** encompassing regional risk assessment, stakeholder impact and engagement, policy process and engagement, critical issues and responses, and internal targets and goals.

**IDENTIFY AND REDUCE IMPACTS IN EACH HIGH-RISK GROWING REGION** at the farm and the watershed scale. By June 2020, each high-risk sourcing region will have identified impacts and set new goals to reduce their water impacts.

**COLLABORATE AT THE WATERSHED LEVEL TO PROTECT RESOURCES IN HIGH-RISK AREAS.** By June 2022, Driscoll’s will implement relevant regional programs and BMPs that help meet groundwater sustainability plans in California. By 2025, Driscoll’s will have initiated and supported stakeholder activities that ensure high quality water is accessible, affordable, and reliable to all members of the community in its Mexican growing regions.

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**Highlights of progress through 2019:**

Driscoll’s joined the Challenge in late 2019. The company is working on developing a water policy; its water risk assessments are complete for some regions and underway in others; and it is beginning to incorporate water-related issues in staff training, as well as in growers’ annual contracts. The company convened a grant workshop to help growers identify available funding sources. In some high-risk regions, water tracking and data visualization are being used to improve on-farm water management. Additional grower water trainings have been put on hold due to the global COVID-19 pandemic. Research on water-saving growing technologies continues.
"As we move our sustainability efforts from a concept of sustaining resources to regenerating them, initiatives like the AgWater Challenge have been helpful because they value engagements with those who can make some of the biggest regenerative impacts: the farmer. By incentivizing farmers in our supply chain to adopt outcome-based regenerative practices, we expect to affect watersheds well beyond those we have prioritized."

— Mary Jane Melendez, Chief Sustainability & Social Impact Officer, General Mills
Committed to:

**COMPLETING A COMPREHENSIVE WATER RISK ASSESSMENT** in eight priority watershed regions globally, including the San Joaquin in California.

**CHAMPIONING THE ACTIVATION OF WATER STEWARDSHIP PLANS** for these priority regions, by 2025, by working with NGOs, farmers and other stakeholders.

**SUSTAINABLY SOURCE THE COMPANY’S TOP 10 INGREDIENTS,** representing more than 50% of raw material purchases, by 2020.

Highlights of progress through 2019:

**Water risk assessment and water stewardship plans**

In General Mills’ eight priority watersheds, as identified by a water risk assessment, the company partners with local stakeholders to activate water stewardship plans. Actions taken to-date include field-level work in the Los Angeles and San Joaquin watersheds (with partners in the California Water Action Collaborative) and in the Snake River Basin in Idaho; collective action via the Rio Grande Water Fund, implementing the Alliance For Water Stewardship standard at its Albuquerque facility; water sustainability plan promotion through an educational information portal for all Californians; and water policy advocacy in California as a signatory and Advisory Committee Member of Ceres Connect the Drops initiative. The company is conducting an updated and expanded water risk assessment and will share results in its 2021 Global Responsibility Report.

**Sustainable sourcing**

In FY 2019, the company sustainably sourced 91% of 10 priority ingredients, up from 85% the prior year. The company’s commitment now also includes advancing regenerative agriculture, defined as “agriculture that protects and intentionally enhances natural resources and farming communities.” Regenerative agriculture works with nature to pull carbon from the air and store it in the soil. This improves watershed health by increasing water infiltration and reducing soil erosion, thus improving the quality of nearby lakes, rivers, and streams and ensuring more nutrients stay in the field for plants to absorb.

General Mills’ goal, made in 2019, is to advance regenerative agriculture practices on 1 million acres of farmland by 2030. It has developed a Regenerative Agriculture Measurement Protocol to assess its impact, and it launched several projects with suppliers. These include a three-year pilot with 24 wheat growers in the Kansas Cheney Reservoir watershed, which provides water to more than 400,000 Wichita residents. As part of the pilot, General Mills gives agronomic support to growers who opt into data tracking and field measurements.
“Through Our Food Journey™, we are committed to making the world a better place, which includes our environmental stewardship efforts. We look forward to the continued advancement of our water stewardship efforts through the AgWater Challenge, including expanding our partnerships to promote water quality certification within our supply chain and measurement.”

— Tom Raymond, Director of Environmental Sustainability, Hormel Foods
Hormel Foods

Committed to:

**DEVELOP A COMPREHENSIVE SUSTAINABLE AGRICULTURE POLICY**, with water expectations, that surpasses regulatory compliance for its major suppliers, contract animal growers, and growers that supply animal feed.

**COMPLETE IN-DEPTH WATER-RISK** assessments of quantity and quality challenges in priority sourcing areas.

**ENGAGE WITH GROWERS** in high-risk regions by gathering water-related data.

**SET TIME-BOUND GOALS** for improving water quality in high water-risk regions.

Highlights of progress through 2019:

**Sustainable agriculture policy with clear water expectations**
Hormel Foods published a Sustainable Agriculture Policy that extends to direct suppliers and contract animal producers, as well as to feed grain growers, and outlines expectations for supply chain management of water issues. The company reviews the policy internally on an annual basis; it currently is not gathering or monitoring compliance data.

**Water risk assessment**
Hormel Foods completed a water-risk assessment with its Top 10 suppliers (by spending) to gain insight into water use and quality issues. The company is evaluating where to focus its efforts, such as identifying priority risks at the sub-watershed level.

**Grower engagement**
In 2018, Hormel Foods helped launch the public-private Cedar River Watershed Partnership, focused on improving water quality in southern Minnesota. Through the partnership, Hormel Foods hosted recruitment and educational events for farmers, including one focused on maximizing soil health. A priority of the partnership is to help farmers in the Cedar River watershed in southern Minnesota become certified through the Minnesota Agricultural Water Quality Certification Program. Hormel Foods hopes to scale, expand, and replicate these partnerships, and continue promoting water quality certification within its supply chain.

**Time-bound goals aimed at improving water quality**
The company is on track to achieve its 10% operational water use reduction target set for 2020, but has not yet set a time-bound goal for improving water quality.
“Farmers are critical to building a more resilient future. We are proud to work with and learn from farmers and countless partners who produce our ingredients while protecting soil health and enhancing biodiversity. We thank the suppliers and hundreds of thousands of farmers we reach through our programs for their partnership, as we address the interconnected issues of food security, climate resiliency, and the wellbeing of people, communities, and the planet.”

— Kate Schaffner, Manager, Sustainable Agriculture, Global Sustainability

Committed to:

RESPONSIBLY SOURCE ITS GLOBAL 10 PRIORITY INGREDIENTS by 2020 through continuous improvement for row crops via water and fertilizer use metrics.

Highlights of progress through 2019:

Responsible sourcing and grower support
The Kellogg Company has been actively implementing commitments through dozens of active Kellogg’s Origins™ projects around the world, sharing progress publicly by commodity in its Responsible Sourcing Annual Milestones report. In alignment with the UN Sustainable Development Goal 2030 targets, the Kellogg Company set ambitious next-generation commitments that include supporting one million farmers and workers, including women and smallholders, through programs focused on climate, social, and financial resilience.

By 2018, Kellogg reached over 329,000 farmers through climate and water-smart programs, research, and technical assistance, and measured continuous improvement across over 198,000 hectares. The company will publicly report greater reach for 2019.
SUPPORT OVER 70 AGRICULTURAL SUPPLIERS AND MILLERS, AND 1,700 FARMERS across 22 countries to optimize water use and enhance watershed quality.

In the U.S., Kellogg has participated in six Regional Conservation Partnership Program (RCPP) projects across the Midwest and in the Rice Belt. These collaborative partnerships provide funding and technical assistance to farmers to improve water quality by reducing excess nutrients and sediment loss. The Saginaw Bay Watershed Conservation Partnership, managed by The Nature Conservancy (TNC) in Michigan, reported that farmers representing nearly 63,000 acres in the five-year program saw a reduction of about 3,500 tons of sediment runoff, the equivalent of 250 dump trucks of material.

Kellogg also provided an incremental gift to TNC to expand its Pay for Performance program. The gift will provide more Saginaw Bay farmers with financial incentives to implement soil health practices that help capture carbon, save topsoil, reduce harmful runoff, protect biodiversity, and improve water quality.

This expansion is one pillar of Supporting U.S. Farmers, a multistate collaboration TNC and Kellogg launched in 2019 to incentivize conservation agriculture practices among corn, wheat, and rice farmers in the Mississippi River Basin and Great Lakes regions. During its first year, the collaboration

- Enrolled 87 farmers representing about 39,000 acres.
- Installed 92 pump timers with Arkansas rice farmers to encourage water efficiency and reduce runoff into waterways that connect to the Mississippi River.
- Increased cost-share to implement practices such as cover crops and pollinator strips on almost 4,000 acres in Michigan, reducing about 328 metric tons of sediment runoff.

Looking to 2030, Kellogg plans to expand its responsible sourcing programs beyond its current 10 priority ingredients, based on an updated ingredient materiality assessment that incorporates environmental and social impact. In 2020, Kellogg will share its updated priority ingredients and continue to report progress annually in its Responsible Sourcing Milestones.

SET CLEARER EXPECTATIONS on sustainable sourcing for both procurement managers and suppliers.

Expectations on sustainable sourcing for procurement and suppliers

Kellogg links its procurement supplier and employee performance assessments, as well as new supplier qualifications, to sustainable sourcing expectations.
“PepsiCo’s water journey has been an example of what can be accomplished on the ground when companies with a large footprint work hand in hand with farm communities to improve their daily operations, with a view towards our shared future. As our journey evolves, we hope to learn from the AgWater Challenge as we continually seek the partners and strategic alignment necessary for ideal water stewardship.”

— Margaret Henry, Director, Sustainable Agriculture
Committed to:

Work 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.

**SUSTAINABLE SOURCING OF ALL THE COMPANY’S MAJOR CROPS**, including those that it directly sources, such as potatoes, corn, oats, and citrus by 2020, as well as key commodities it indirectly procures by 2025.

Highlights of progress through 2019:

**Improved water efficiency**

PepsiCo is making progress towards meeting its improved water efficiency goals by 2025, and is identifying local goals and implementation plans. In some regions, efficiency improvements will be significantly higher than its 15% target; in others it will be lower, depending on existing efficiencies and resources farmers are able to invest in improvements.

**Sustainable Sourcing**

The company works closely with agricultural producers and has created more than 100 demonstration farms around the world. On these farms, a portion of land is set aside to introduce innovations, while the rest of the farm acts as a control. PepsiCo supports farmers by providing equipment to move from flood to drip irrigation, or by promoting the use of cover crops to improve soil moisture. Demonstration farms are open for peer-to-peer learning by other local farmers, proven to accelerate adoption of sustainable farming practices.

In the U.S., specifically in Iowa and Illinois, PepsiCo is providing incentives to farmers to improve soil health through regenerative agriculture practices, nutrient management, optimized tillage, and cover crop planting on their land in the winter (when land lays bare). These practices also help to reduce nutrient runoff and erosion, which can pollute local rivers.

In 2018, 51% of the potatoes, oats, whole corn, and oranges sourced through the company’s Sustainable Farming Program (SFP) were verified as sustainably sourced, an increase from 24% in 2017.
Committed to:

**PROMOTE SUSTAINABLE WATER MANAGEMENT** in California, particularly through collective action.

Collaborate with suppliers and support the development of **TIME-BOUND, MEASURABLE GOALS TO IMPROVE SOIL HEALTH** across corn and soy acres, such as reducing agricultural runoff in the Mississippi River Basin.

**COLLABORATE WITH PRACTICAL FARMERS OF IOWA AND SUSTAINABLE FOOD LAB** to support future development of small grains and cover crops grown in rotation with corn and soybeans.

Highlights of progress through 2019:

**Promoting sustainable water management**
Since joining the Challenge in 2018, Target has remained an active member of both the California Water Action Collaborative (CWAC) and Ceres Connect the Drops, serving on that Advisory Committee, to promote sustainable water management. Target is co-leading CWAC’s South Coast Working Group with the Pacific Institute.

**Collaborating with suppliers and goals to improve soil health**
Target’s goal is to source 100% sustainable cotton for its owned brand and exclusive national brand products by 2022. It is exploring opportunities to include other key commodities beyond cotton.

Other initiatives include promoting sustainable farming practices in Texas cotton production, and increasing adoption of soil health practices among Mississippi River basin row crop farmers that supply feed to meat supply chains.
Lessons Learned

In seeking to meet their AgWater Challenge commitments, participating companies gained a number of insights about what is working well and the challenges they are facing. Five main “lessons” or themes came to the forefront.

Lesson #1: Single issue sustainability programs do not meet farmer and environmental needs

Water is often embedded or hidden in an agricultural sustainability program, making it difficult to measure water-specific outcomes. Water-specific goals articulated by a company can be challenging to implement on the farm, as farmers may view these additional efforts as an extra burden to an already full workload. Some Challenge participants have found success investing in and promoting the regeneration of natural systems in agriculture, with a focus on soil health in particular, to improve water retention and water quality. Healthier soil can help farmers optimize their use of inputs such as fertilizer and pesticides, and increase the land’s resilience in the face of extreme weather. Other co-benefits may include carbon sequestration (net drawdown) and increased biodiversity. Even when taking a more holistic regenerative approach, companies still need to consider the local context and measure water outcomes accordingly.
Challenge participants also found that linking issues related to water stewardship with broader concepts such as climate-smart agriculture or regenerative agriculture makes a compelling internal business case. This approach connects water-related projects with improved resiliency of its agricultural supply chains, and allows for more meaningful conversations with the producers themselves, as it acknowledges that the water issues related to their business are part of the broader systems in which they operate. In a related vein, companies see value in framing discussions about water as part of the positive contributions agriculture can make (e.g., to purify and capture water) when more sustainable agricultural practices are adopted. In all cases, monitoring and evaluating water outcomes are essential for determining if companies’ and farmers’ efforts are producing the intended water outcomes.

Lesson #2. Choose partners based on proximity, shared challenges, and value chain influence

Given the scale and nature of water-related risks, collaboration is critical to finding effective solutions. This holds true whether in the field (e.g., helping farmers adopt more complex crop rotations for soil health, or collaborating with other brands to develop economically viable cover crop programs), or in the policy sphere, as companies and other stakeholders come together to advocate at the state or watershed level.

Challenge participants found that developing successful partnerships takes time. Ensuring that partnering water users, community stakeholders, and other key stakeholders such as regulatory bodies are “in the same lane” and working towards the same set of outcomes is critical to success.

Another goal for company partnerships is reducing the burden on farmers. In some cases, especially for row crops where rotations are common, buyers across a farmer’s supply chain are coming together to align their programs, allowing the farmer to enroll multiple crops (e.g., wheat, soy, and corn). This value-chain approach draws in multiple companies over a longer timeframe and simplifies the business case for farmers to adopt sustainable practices. In other cases, existing programs or NGOs might already be working in a particular watershed, and it is more practical and effective for companies to simply connect farmers in their supply chain with related projects.

Since the policy and regulatory issues surrounding water management are inherently complex, companies also agree that advocacy partnerships (such as the Ceres Connect the Drops initiative, focused on smart water policies in California) require a full understanding of local concerns, along with the ability to come to decision-makers with a collective voice.

Lesson #3. Scrap your corporate language when making the business case with farmers

Participants in the Challenge are large companies and many operate across multiple countries. Unless their agricultural suppliers are a legal part of the corporation, their business case for sustainability implementation is not the same as their suppliers’.

While having a goals, vision and policy for sustainable agriculture is important, companies have found that progress is only possible by meeting farmers “where they are,” based on their challenges and needs. Companies need to translate abstract global commitments into local action, and frame them in ways that articulate clear value to farmers.
reaching farmers successfully are often doing so by using language that resonates with them, connecting water-related issues to the success of the farmer’s business, and identifying targeted and practical place-based solutions.

Understanding the local context when addressing water issues is particularly critical since each catchment has unique hydrologic, cultural, regulatory, environmental, social, and economic characteristics. In the U.S. (and elsewhere), other factors that affect farmer engagement include whether farmers own or lease their land, the number of years a farmer has farmed, and the level of understanding about a crop’s water risks in a particular sub-watershed and specific microclimate.

Lesson #4. One way or another, water-smart agricultural practices need to be funded

Across the value chain, sustainability budgets are miniscule compared with the scope of challenges that need to be addressed. Working with partners is one way to help share the costs, but there are other direct and indirect funding opportunities that AgWater Challenge participants have found. In some cases, a combination approach will be necessary.

Providing financial support or other incentives to farmers as they transition to more sustainable methods of production (e.g., to purchase new seed or equipment or to weather the uncertainty of new practices) helps companies fortify their supply chains against weather extremes that are becoming more frequent due to climate change.

Some companies participating in the Challenge are connecting farmers to existing sources of funding (e.g., from the state, federal government, private foundations, or NGOs). This approach includes offering workshops to identify available grants, as well as facilitating access to low-cost financing options. In some watersheds, ecosystem service credits for water quality improvements encourage farmers to adopt different practices. In other cases, companies offer cost-sharing arrangements or direct premiums in recognition of a grower’s investment and time.

Lesson #5. Measurement doesn’t always lead to impact

As the saying goes, “if you can’t measure it, you can’t manage it.” Companies and farmers must be able to measure performance change to
determine whether a particular approach is having the intended effects. However, measurement alone is not enough. Further, **measurement tools are not one-size fits-all**, and water projects need the right combination to understand how far they have come in meeting sustainability goals. One component of progress measurement may be examining practice change, but these changes must be linked to the outcomes observed using data to measure progress and promote change is a common approach. Some companies have used this information to help farmers understand the business case for implementing certain practices. A number of companies participate in Field to Market’s Fieldprint® projects. In these projects, supplier partners connect with agricultural producers and, through various means, share sustainability data collected through the project (e.g., water efficiency of pivots or nitrogen use). **Farmers are connected to additional resources to help implement best practices on the farm based on this data.** Other opportunities for peer-to-peer learning include demonstration farms or participation in a company’s sustainable farming program.
As WWF and Ceres reflect on the past four years of the AgWater Challenge, a few points are clear. The AgWater Challenge has shown that there are many opportunities for action, and considerable positive work has been done to achieve the respective commitments. However, ensuring these planned actions stay completely on track is never entirely possible. Adaptive learning must be part of the sustainability journey. Much progress comes from trying out new partnerships and giving promising projects and ideas a chance. The AgWater Challenge participants weathered staff and leadership transitions, key commodity-sourcing area shifts, mergers, and changing funding priorities — all while working towards their water and other sustainability goals. These companies have made progress, but the challenge of safeguarding the water resources that agriculture both relies on and impacts is enormous, and will take many more stakeholders coming to the table. To this end, WWF and Ceres will continue to refine the AgWater Challenge to drive impact and enable additional AgWater Stewards to join these critical efforts.

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