



Accelerating water action in agricultural supply chains

Practical steps for building supply chain water resilience

May 2026

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Overview

Agricultural practices have a high level of dependency and impact on water. The increasing effects of climate change, groundwater depletion and water pollution continue to elevate the risk of production disruption and financial shocks to companies with agricultural supply chains.

However, addressing water-related dependencies, impacts, risks, and opportunities (DIROs) in agricultural supply chains is challenging for the following reasons.

- **High variability and year-over-year changes** in suppliers and supplier volumes make it difficult to know which suppliers to work with.
- **Low visibility and traceability** into where companies source agricultural raw materials make it difficult to know where to focus.
- **Limited or no control** over how water is managed at the farm and landscape level make it difficult to incentivize change.
- **Internal silos** between sustainability and procurement teams, and conflicting objectives, make it difficult to develop a harmonized approach.

As a result, few companies have made direct commitments to take water action in their agricultural supply chains – especially in comparison with widespread commitments to cut greenhouse gas emissions, reduce deforestation, support regenerative agricultural practices and enhance responsible sourcing, all of which may contribute water benefits.

A practical approach

In response, this guide has been developed to share a pragmatic approach to addressing water-related DIROs in agricultural supply chains, based on the common elements and insights of effective practices and programs currently being implemented by leading companies and nonprofit groups, many represented in the external advisory group.

The approach outlines four practical steps: **Assess-Prioritize-Commit-Act** (see Figure 1), with accompanying key outputs, implementation tips & tricks and supporting references.

Specifically, these steps are intended to:

- build on and complement existing disclosure frameworks (e.g., the Task Force on Nature-related Financial Disclosures

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(TNFD) and European Sustainability Reporting Standards (ESRS)), and relevant action frameworks (see Appendix A),

- be applicable to companies of all sizes and maturity levels, and in all relevant industries with agricultural supply chains,
- provide flexible (nonmandatory) activities to consider and tailor to the individual needs of the company and context, and
- build confidence and facilitate learning by doing to accelerate action.



Intended use and exclusions

The guide is primarily intended to support water practitioners, and supporting functions, in companies with a high reliance on agriculture to address priority water-related DIROs in their agricultural supply chain. Doing so can improve on-the-ground outcomes, build business resilience, and help to meet shareholder, disclosure and consumer expectations.

This guide does not directly consider:

- DIROs related to access to safe water, sanitation or hygiene (WASH) services (see Box 1 for further guidance),
- responsible sourcing or procurement practices related to supplier compliance or performance, or
- transportation and delivery of agricultural products (e.g., river transport, processing or packaging of agricultural products).

This guide is not intended to be mandatory or prescriptive, or used as a supplier benchmarking tool, but rather provides high-level and flexible guidance.

Abbreviations

CSRD	Corporate Sustainability Reporting Directive
DIROs	dependencies, impacts, risks, and opportunities
ESRS	European Sustainability Reporting Standards
KPIs	key performance indicators
LEAP	locate, evaluate, assess, prepare
TNFD	Task Force on Nature-related Financial Disclosures

Box 1: Further WASH related guidance

- [WaterAid \(2026\) Roots of resilience: How water, sanitation and hygiene strengthens agricultural supply chains](#)
- [WaterAid \(2025\) Water, sanitation and hygiene in the evolving EU legislative environment – corporate playbook](#)

Figure 1: Overview of four practical steps for building water resilience in agricultural supply chains





Step 1: Assess

Identify risk hot spots

- A. **Identify** business critical agricultural products (to start with)
- B. **Understand** water-related dependencies, impacts, risks, and opportunities (DIROs)

1A – Identify: business-critical agricultural products (to start with)

APPROACH

Pick where to start – identify agricultural products that are critical to the company’s business or production continuity. Early focus on business-critical agricultural products helps to filter complexity, direct efforts to material issues, and promote buy-in from senior leadership and relevant internal stakeholders.

Keep it simple, practical and relevant to your company – consider the following options when deciding where to start.

- **FOCUS ON ONE AGRICULTURAL PRODUCT (PILOT):** choose a product that is indisputably relevant for the company as a proof of concept – this can help test and socialize the approach to identify business-critical agricultural products with internal stakeholders, keep the budget low, and allow for later expansion of the scope of agricultural products considered.
- **PRIORITIZE MULTIPLE AGRICULTURAL PRODUCTS BASED ON KEY ATTRIBUTES:**
 - **location** – focus on agricultural products sourced in one or more locations that are critical to the company and where the enabling conditions are adequate to implement key actions, to learn, and to inform how to scale solutions across other locations
 - **business relevance** – focus on agricultural products or suppliers that have strategic relevance to the company’s bottom line (e.g., sourcing volume, spend, profit, relevance for key brands, alignment with long-term business plans)
 - **data availability** – focus on agricultural products with a reasonable level of traceability (i.e. accessible sourcing origination location data) – for example, crops sourced directly from farmers typically have the highest levels of traceability, relative to those sourced from cooperatives, traders, or the open market (typically lowest level), and
 - **existing programs and priorities** – focus on agricultural products that are already engaged in existing responsible sourcing, regenerative agriculture or industry certification programs.
- **FOCUS ON ALL AGRICULTURAL PRODUCTS:** can be useful when a company sources only a few agricultural products.

KEY OUTPUTS

- ❑ **DATA:** business critical agricultural products to start with
- ❑ **ENGAGEMENT:** internal stakeholders understand:
 - the range of agricultural products to be considered, and why they have been selected

TIPS & TRICKS

- ✓ **Convene a core team:** this is challenging to achieve alone; consider convening a small team of invested internal stakeholders with cross-functional representation and defined roles and responsibilities.
- ✓ **Tailor it to your needs:** there is no standard for how to do this; start with what makes most sense and is justifiable to your leadership and stakeholders.
- ✓ **Filter complexity:** consider the 80/20 rule to keep it simple, practical and actionable.
- ✓ **Learn by doing:** don’t wait until you have perfect data; work with what you have so that you can start to make progress and learn, adapt, and improve over time.

1B – Understand: water-related dependencies, impacts, risks, and opportunities (DIROs)

APPROACH

Leverage the TNFD LEAP process or follow an aligned approach – consider the following key steps when assessing water-related dependencies, impacts, risks, and opportunities (DIROs) for the business-critical agricultural products identified in **Step 1A**.

- **LOCATE:** where priority agricultural product(s) are consistently sourced from year-over-year, using origination location and volumes at a national (e.g., country), subnational (e.g., region, state, province, county) or local (e.g., address, coordinate) level.
- **EVALUATE:**
 - **Dependencies:** using reported water withdrawal volumes where available, or estimated blue water footprints for irrigated agriculture and estimated green water footprints for rainfed agriculture, and
 - **Impacts:** on local water availability (e.g., by estimating water withdrawals for irrigated agriculture, or water consumption for rainfed agriculture, in excess of sustainable basin thresholds), and quality (e.g., by estimating excess nitrogen and phosphorus emissions).
- **ASSESS:**
 - **Risks:** including physical risks (e.g., acute, chronic) and transition risks (e.g., policy, market, reputation, liability) and existing risk mitigation controls and adaptation practices, and
 - **Opportunities:** for example, from having positive impacts or mitigating negative impacts on water resources.

KEY OUTPUTS

- ❑ **DATA:** location-specific quantitative or qualitative assessment of water-related DIROs for business-critical agricultural products
- ❑ **ENGAGEMENT:** internal stakeholders understand the extent to which business critical agricultural products:
 - depend on water resources
 - impact water availability and quality
 - represent material water-related risks or opportunities

TIPS & TRICKS

- **SEE APPENDIX B** for recommended indicators, data sources and methods.
- ✓ **Use categories and dashboards** to synthesize and help communicate results.

- ✓ **Focus on consistent sourcing locations:** consider limiting the assessment to sourcing locations that are more consistently used year-over-year to help focus on locations with higher long-term relevance.

- ✓ **Lean on procurement teams:** work together to access the most relevant and recent procurement data (e.g., origination volumes and locations) and build understanding and confidence in the process.

- ✓ **Leverage internal GHG inventory data:** origination locations and volumes (already organized and vetted) are required to build a GHG inventory, and can be repurposed to assess water-related DIROs.

Further guidance:

- [TNFD 2023](#): Guidance on the identification and assessment of nature related issues: The LEAP approach
- [Science Based Targets Network, 2023](#): SBTN Step 1: Assess
- [WRI 2021](#): Developing Enterprise Water Targets Informed by Local Contexts: Cargill’s Approach



Step 2: Prioritize

Decide where to start

- A. **Prioritize** key agricultural products and locations for action
- B. **Select** practical pathways to address water-related risks

2A – Prioritize: key agricultural products and locations for action

APPROACH

Develop a simple and transparent approach for prioritizing where to focus action – based on review of the water-related dependencies, impacts, risks, and opportunities (DIROs) for business-critical agricultural supply products developed in Step 1B, aligned with the company’s approach to materiality. For example, consider the following options.

- **DEPENDENCY (OR IMPACT):** prioritize agricultural products and locations with the greatest reliance (or negative effects) on water resources, and
- **RISK (OR OPPORTUNITY):** prioritize agricultural products and locations where water resources pose a financially material threat (or opportunity) to business continuity.

Proactively engage with relevant internal stakeholders at this critical step – to enhance alignment with broader business priorities, promote buy-in, and build shared understanding around:

- the agricultural products and locations selected, and their relevance to the business, and
- the high-level business case / drivers for where to allocate resources to address water-related risks across the agricultural supply chain.

KEY OUTPUTS

- ❑ **DATA:** priority agricultural products and locations to implement programs to address water-related risks
- ❑ **ENGAGEMENT:** internal stakeholders understand
 - the priority agricultural products and locations selected to address water-related risks, and why they have been selected
 - the high-level business case / drivers for action

TIPS & TRICKS

➢ **SEE APPENDIX C** for sample prioritization approaches.

✓ **Consider developing transparent principles** for prioritization that can be easily applied and communicated to promote buy-in.

✓ **Keep it simple:** there is no standard for how to do this; develop a simple and practical approach that makes sense for your business and needs.

Further guidance:

- [INSEAD 2022: ESG Strategy in Action](#)
- [Science Based Targets Network, 2023: SBTN Step 2: Interpret & Prioritize](#)
- [WRI 2021: Developing Enterprise Water Targets Informed by Local Contexts: Cargill’s Approach](#)

2B – Select: practical pathways to address water-related risks

APPROACH

Understand how agricultural products are sourced, your level of visibility and influence on farm practices – for each agricultural product and location prioritized in Step 2A to understand how to drive change in your agricultural supply chain. The typical relationship between how agricultural products are sourced and the level of visibility and influence is outlined below (Box 2).

BOX 2:	Sourcing approach	Typical level of visibility and influence
Direct	From growers or farmers	High
Indirect	From third-party brokers, cooperatives, aggregators or processors that source directly from growers or farmers	Moderate to low
	From processors or traders on the open market that don't source directly from growers or farmers	Low to no

Identify potential pathways to address water-related risks, considering for your level of visibility and influence over on-farm practices – consider the high-level summary of potential pathways provided in Table 1 for each agricultural product and location prioritized in Step 2A.

KEY OUTPUTS

- ❑ **DATA:** high-level practical action pathways to address water-related risks for priority agricultural products and locations
- ❑ **ENGAGEMENT:** internal stakeholders and key suppliers understand
 - the pathways and practices available to embed water risk management into procurement practices across agricultural supply chains

TIPS & TRICKS

- **SEE TABLE 1** for a high-level summary of potential pathways to address water-related risks in agricultural supply chains
- ✓ **Think visibility and influence:** when defining pathways to address water-related risks, it is critical to consider how agricultural products are sourced, and based on that, the degree of visibility and influence over on-farm practices
- ✓ **Proactively engage procurement teams and suppliers:** to evaluate and select the most appropriate and effective pathway(s) for the unique supplier context and commercial relationship
- ✓ **Iterate if required:** if no credible pathways can be found for certain agricultural products or locations, consider returning to Step 2A

Further guidance: [WWF 2023](#): Advancing Water Stewardship Through Supplier Collaboration

Table 1: High-level summary of potential pathways to address water-related risks in agricultural supply chains

DIRECT		Direct Pathways	Description	Examples
DIRECT	Commercial incentives	Company incentivizes supplier actions through procurement process	<ul style="list-style-type: none"> ▪ Pricing premiums or bonuses ▪ Favorable contract terms ▪ Pay for performance schemes 	<p>↑</p> <p>Pathways available to companies with moderate to high visibility and influence over growers and farmers</p>
	Access to capital	Company works with supplier to enable access to finance and capital	<ul style="list-style-type: none"> ▪ Loans or loan guarantees ▪ Direct payment or investment ▪ Access to grants or subsidies 	
	Capacity building	Company works with supplier to increase awareness, skills and capacity	<ul style="list-style-type: none"> ▪ Provision of training and education ▪ Access to technical support and service providers ▪ Provision of data, equipment or tools 	
INDIRECT		Indirect Pathways	Description	Examples
INDIRECT	Policy advocacy	Company advocates for improvements in the regulatory or policy environment in which the supplier operates	<ul style="list-style-type: none"> ▪ Improved water governance and policies ▪ Improved permitting process and criteria ▪ Improved regulatory enforcement practices 	<p>↑</p> <p>Pathways available to companies with low to no visibility or influence over growers and farmers</p>
	Industry collaboration	Company helps standardize sectoral practices and requirements to help reduce the workload of suppliers	<ul style="list-style-type: none"> ▪ Aligned sectoral commitments and expectations ▪ Consistent and align reporting standards ▪ Sectoral standard adoption 	
	Basin-scale projects	Company supports projects that address shared water challenges in the basin where suppliers are located	<ul style="list-style-type: none"> ▪ Enhanced gray or green water infrastructure ▪ Land conservation and restoration ▪ Demand management 	

Source: modified and adapted by authors from [WWF 2023](#): Advancing Water Stewardship Through Supplier Collaboration



Step 3: Commit

Define what to achieve

- A. **Define** key objectives and success criteria / targets
- B. **Prepare** high-level action plans; secure buy-in and funding

3A – Define: key objectives and success criteria / targets

APPROACH

Define one or more **SMART objectives that drive action and accountability** – toward addressing the water-related risks and pathways for priority agricultural products and locations identified in Step 2B. Objectives should typically seek to achieve the following.

- Support the company’s overall purpose, values and vision.
- Reduce, regenerate or restore water resources in agricultural lands and/or the watersheds surrounding agricultural lands.
- Mitigate risk by addressing root causes to increase water supply security and long-term water resilience.
- Reflect the company’s unique agricultural supply chain needs and context, including the company’s relationship with suppliers, the type of suppliers, year-over-year variability in sourcing volumes and locations, and overall level of traceability.
- Allow progress tracking via the use of measurable, time-bound KPIs that are practical, pragmatic, and draw on readily available information and procedures.

Consider the following approaches to further strengthen the effectiveness of the objectives and success criteria developed.

- Align with existing business processes, priorities and ongoing complementary initiatives and efforts (e.g., regenerative agriculture, responsible sourcing or others) – to help promote buy-in and integration, minimize upfront costs, accelerate action and capitalize on learnings.
- Use your objectives to set internal or external commitments, goals or targets (where relevant) – to help drive accountability and build trust with relevant external audiences, such as investors, consumers, customers, or regulators (see Table 3 for examples).
- Proactively engage procurement teams and suppliers throughout the process – to align expectations and confirm that objectives developed are appropriate for the unique supplier context, commercial relationship, and situation.

KEY OUTPUTS

- ❑ **DATA:** clear objectives and success criteria for addressing water-related risks for priority agricultural products and locations
- ❑ **ENGAGEMENT:** internal stakeholders, key suppliers and customers understand:
 - the objectives and success criteria for addressing water-related DIROs for priority agricultural products and locations
 - where to focus attention and resources in the agricultural supply chain

TIPS & TRICKS

- **SEE TABLE 2** for high-level summary of the mitigation hierarchy principles applied to agricultural supply chains
- **SEE TABLE 3** for examples of water goals or targets in agricultural supply chains

- ✓ **Be SMART:** make objectives specific, measurable, achievable, relevant and timebound (SMART) to focus effort and drive accountability
- ✓ **Don’t be too ambitious:** get started, build internal momentum, learn by doing and scale

- ✓ **Tailor your objectives to the context:** consider defining different objectives (types and/or ambition levels) for different agricultural products and/or locations based on the type and magnitude of risk.

- ✓ **Evaluate sectoral standards and guidance:** to select the elements that are well-suited to address the specific water-related risks threatening priority agricultural products and locations selected.

Further guidance:

- [Science Based Targets Network, 2023](#): SBTN Step 3: Freshwater Targets
- [WRI 2021](#): Developing Enterprise Water Targets Informed by Local Contexts: Cargill’s Approach
- [Mars 2025](#): Water Stewardship Position Statement

Table 2: High-level summary of the mitigation hierarchy principles applied to agricultural supply chains

When there is **high visibility, influence and willingness** of suppliers to participate ← → When there is **low or no visibility, influence or willingness** of suppliers to participate

	REDUCE	REGENERATE	RESTORE
Aim	Minimize water-related risks by reducing agricultural water use and pollution as much as possible	Address water-related risks by improving, restoring or recovering water resources on agricultural lands in the company’s supply chain	Address water-related risks by improving, restoring or recovering water resources in the watersheds supplying water resources to agricultural lands in or outside the company’s supply chain
Scale of intervention	<ul style="list-style-type: none"> ▪ In field 	<ul style="list-style-type: none"> ▪ In field ▪ Edge of field 	<ul style="list-style-type: none"> ▪ In the watershed, including in agricultural lands outside the company’s supply chain
Pathways to drive action	<ul style="list-style-type: none"> ✓ Commercial incentives ✓ Access to capital ✓ Capacity building ✓ Policy advocacy ✓ Industry collaboration 	<ul style="list-style-type: none"> ✓ Commercial incentives ✓ Access to capital ✓ Capacity building ✓ Policy advocacy ✓ Industry collaboration 	<ul style="list-style-type: none"> ✓ Policy advocacy ✓ Industry collaboration ✓ Basin-scale projects
Example actions	<ul style="list-style-type: none"> ▪ Irrigation conversion ▪ Irrigation optimization ▪ Fertilizer optimization 	<ul style="list-style-type: none"> ▪ Cover crops ▪ No or low till ▪ Mulching 	<ul style="list-style-type: none"> ▪ Enhanced gray or green water infrastructure ▪ Land conservation and restoration ▪ Demand management

Source: modified and adapted by authors from [Cargill \(2024\)](#) Position Paper: Supply Chain Water Target Accounting and informed by TNFD’s recommendation to follow SBTN’s Action Framework when determining responses to identified nature-related issues.

Table 3: Examples of water goals or targets in agricultural supply chains

Water goals or targets in agricultural supply chains	
<p><u>Cargill</u></p> <p>By 2030, Cargill will enable restoration of 600 billion liters of water and reduction of 5,000 metric tons of water pollutants in water-stressed regions</p>	<p><u>Ingredion</u></p> <p>Implement water conservation projects with growers in 100% of extremely high water-stressed sourcing geographies by the end of 2025</p>
<p><u>Danone</u></p> <p>Ensure that 50% of the key water-material ingredient volumes sourced from water-risk areas will be produced under water improved management by 2030</p>	<p><u>Mars</u></p> <p>Halve the company's gap to sustainable water usage levels by 2025 and ensure water use in each watershed in the value chain is within annually renewable levels in the long term</p>
<p><u>Diageo</u></p> <p>Support suppliers of irrigated agricultural crops with water efficiency</p>	<p><u>Molson Coors</u></p> <p>Improve the water-use efficiency of the company's agricultural supply chain and malting operations by 10% by 2025 versus 2016</p>
<p><u>General Mills</u></p> <p>Advance regenerative agriculture in California almonds, a priority watershed and high-risk ingredient, inspired by water impact in Kansas regenerative agriculture wheat pilot</p>	<p><u>Nature's Pride</u></p> <p>100% water compliance (following the SIFAV Basket of Water Standards) of partner growers for all products from all countries; activate collaboration throughout the value chain to contribute to bringing water use within annually renewable limits in four priority watersheds in Peru, Chile, Spain, and Morocco; advocate for and implement WASH improvements in agricultural value chains; and advance regenerative agriculture among partner growers</p>
<p><u>Hormel Foods</u></p> <p>Support sustainable agriculture initiatives that promote soil health, encourage biodiversity and protect watersheds within our supply chain</p>	<p><u>PepsiCo</u></p> <p>Aim to work with farmers and NGOs to improve agricultural water-use efficiency as part of company's pep+ regenerative agriculture ambition (to spread the adoption of regenerative agriculture or restorative or protective practices across 10 million acres of land supporting the growth of the company's key crops and ingredients by 2030)</p>

3B – Prepare: high-level action plans, secure buy-in and funding

APPROACH

Develop internal high-level action plans to focus effort and resources for each objective defined in Step 3A. Typically, high-level action plans should include:

- desired outcomes, timelines, and suggested milestones and key performance indicators (KPIs),
- estimate cost ranges,
- functional roles and responsibilities, and
- recommended approach for tracking and reporting progress.

Embed high-level action plans in commercial contracts and KPIs – for example, annual plans for buyers, mid-year evaluation of sourcing directors, or bonus / remuneration / incentive structures linked to achieving water KPIs.

Create simple real-time dashboards to monitor and communicate progress – for example, using existing tools and resources such as Power BI. Dashboard summaries are invaluable to:

- providing regular (e.g., monthly) progress reports to relevant stakeholders and leadership,
- driving accountability, and
- triggering timely intervention if progress goes off track.

KEY OUTPUTS

- ❑ **DATA:** clear plan of key actions, resources (time, budget, effort), roles and responsibilities required to meet each objective for addressing key water-related risks for priority agricultural products and locations
- ❑ **ENGAGEMENT:** internal stakeholders and key suppliers understand
 - the approach and resources required to address water-related DIROs in the agricultural supply chain for priority products and locations

TIPS & TRICKS

➤ **SEE APPENDIX D** for an example high-level action plan template.

✓ **Leverage existing approaches and templates:** develop high-level action plans to align, whenever possible, with existing internal processes and business planning cycles.

✓ **Build detail over time:** focus on key actions to advance in the short term (1–2 years) through engagement with relevant internal stakeholders and suppliers.



Step 4: Act

Implement meaningful action

- A. **Collaborate** with stakeholders to support action (existing or new initiatives)
- B. **Sustain** ongoing interventions, tracking and reporting

4A – Collaborate: with stakeholders to support action (existing or new initiatives)

APPROACH

The detail of how you choose to act will depend on the pathways and commitments selected in Steps 2–3 to drive change. However, key points to consider in most contexts are outlined below.

Understand the local context to identify opportunities to support ongoing initiatives or develop new ones – by engaging with suppliers and other stakeholders for each priority agricultural product and location. Then work together to:

- **ASSESS BASELINE CONDITIONS** by understanding the local context, current practices in field, edge of field, or in the watershed and ongoing initiatives,
- **IDENTIFY CHANGES REQUIRED** to close gaps between the baseline conditions and company objectives, and
- **DETERMINE APPROPRIATE (NEW OR EXISTING) INTERVENTION TYPE(S)** that will be required to meet company objectives, e.g., to
 - reduce agricultural water use and pollution in field
 - regenerate and restore water resources in field, edge of field or in the watersheds supplying water resources to agricultural lands.

Co-develop an implementation plan – for your contribution, with suppliers and other stakeholders. Typically, the implementation plan will outline:

- **GOVERNANCE AND MONITORING ARRANGEMENTS:** to ensure the desired outcomes are clear, resources are effectively mobilized, and responsibility for delivery is established, and
- **MONITORING AND EVALUATION PROGRAM:** to ensure suppliers or partners are making contributions that are increasing resilience, improving supply security and reducing water-related risks. Where possible, consider building on and collaborating with existing monitoring and evaluation efforts.

KEY OUTPUTS

- **DATA:** clear implementation plan of key actions to be undertaken with stakeholders (with allocated roles, responsibilities and resourcing), and the outcomes to be achieved for each initiative / collaboration
- **ENGAGEMENT:** internal stakeholders, key suppliers, external stakeholders understand:
 - the approach, required resources and desired outcomes of collaborative initiatives

TIPS & TRICKS

- ✓ **Think win-win:** interventions that are beneficial to the farmer (e.g., in finances, effort or time) as well as the company are more likely to be sustained over time.
- ✓ **Engage external experts:** to help navigate the technical complexity of designing an effective measurement and evaluation program if you don't have the technical capabilities within your company.
- ✓ **Remember to consider the willingness of suppliers to participate:** to focus on intervention types that are likely to be more effective in your context (as outlined in Table 2).
- ✓ **Establish partnerships:** look for organizations that are trusted by local growers, and have both the relevant experience and capacity to deliver, to enhance the success rate and provide access to expertise and local networks.

Further guidance:

- [WWF 2023](#): Advancing Water Stewardship Through Supplier Collaboration

4B – Sustain: ongoing interventions, tracking and reporting

APPROACH

Monitor progress, engage continually, and make adjustments – by regularly (at least annually) collecting and reviewing updates / progress reports from suppliers and/or third-party collaborators to track progress against the implementation plan developed in Step 4A, and the progress KPIs established in Step 3A. Proactively engage with procurement teams, suppliers and collaborators throughout the process to review progress, ensure accountability and make any necessary adjustments to the pathways, activities, monitoring and evaluation plans, or resources.

Evaluate performance – by reviewing implementation records and monitoring results to evaluate program:

- **EFFICIENCY:** the extent to which the activities and deliverables were accomplished within the expected timeline and budget
- **EFFECTIVENESS:** the extent to which the activities implemented have achieved their objectives, including productivity and financial savings to growers, farmers or other implementing organizations involved, and
- **IMPACT:** the extent to which conditions have changed due to the activities.

Learn and improve – by reviewing your performance and broader experience with procurement teams, suppliers, and collaborators to identify key successes, challenges / barriers and learnings, and use these insights to strengthen existing and future programs, interventions and collaborations.

Scale action and impact – by proactively looking for opportunities inside and outside your company to:

- **SHARE RESULTS (AND INSIGHTS):** to build credibility for your actions, demonstrate what is possible, and encourage others to take action (at all levels from local growers and implementing partners, to large multinational corporations)
- **DEMONSTRATE THE BUSINESS CASE:** to leadership, internal and external stakeholders around the value of undertaking supply chain interventions to address water-related risks to the business, and
- **DEEPEN YOUR ENGAGEMENT:** with suppliers and partners by leveraging your experience of working together (e.g., capacity building or providing access to capital) to evolve your collaborations and action across the supply chain.

KEY OUTPUTS

- ❑ **DATA:** clear measure of program performance (efficiency, effectiveness and impact) of initiatives undertaken to address key water-related risks for priority agricultural products and locations (relative to defined objectives / success criteria)
- ❑ **ENGAGEMENT:** internal stakeholders, key suppliers, external stakeholders and customers understand:
 - what has been undertaken and the value (and/or effectiveness) of the intervention

TIPS & TRICKS

✓ **Leverage technology:** consider opportunities to use emerging technologies, dashboards and innovations to help collect data, analyze and share results.

✓ **Communicate progress to all growers:** show what is possible and encourage other growers to participate and scale their efforts.

✓ **Acknowledge and manage uncertainty:** water-related programs in agricultural supply chains rarely evolve as anticipated; monitor progress and material changes in context (e.g., technical understanding, procurement priorities, collaborating partners, institutional and political arrangements) and adapt accordingly.

Further guidance:

- [ABInBev, TNC and Bluerisk, 2022](#) A Recipe for Impact
- [TNC and ABInBev, 2021](#) Measuring and Evaluating the Impact of Corporate Watershed Projects



Appendices

- A. [High-level alignment summary](#)
- B. [Recommended indicators, data sources, and methods](#)
- C. [Examples of approaches for prioritization](#)
- D. [Example of action plan template](#)

Appendix A: High-level alignment summary

Water action in agricultural supply chains – steps		Disclosure Frameworks		Action Frameworks					
		TNFD	ESRS E3 Water	AWS Standard	SBTN Freshwater	SAI Platform: Farm Sustainability Assessment	Global GAP: SPRING	Field to Market: Fieldprint Platform	Rainforest Alliance: Sustainable Agriculture Standard (Farm)
		2023	2025	V3.0 (2026)	V1.1 (2024)	V3.0 (2024)	V2.0 (2023)	V5 (2025)	V1.4 (2025)
1: Assess Identify risk hot spots	A. Identify: business-critical agricultural products	X	X		X				
	B. Understand: related water dependencies, impacts, risks, and opportunities (DIROs)	X	X		X				
2: Prioritize Decide where to start	A. Prioritize: key agricultural products and locations for action	X			X				
	B. Select: practical pathways to address water-related risks								
3: Commit Define what to achieve	A. Define: key objectives and success criteria / targets	X	X		X				
	B. Prepare: high-level action plans; secure buy-in and funding								
4: Act Implement meaningful action	A. Collaborate: with stakeholders to support action (existing or new initiatives)			X		X	X	X	X
	B. Sustain: ongoing interventions, tracking and reporting	X		X		X	X	X	X

Appendix B1: Recommended indicators and data sources

Indicators	Relevance		Data sources			Required to assess		
	Irrigated	Rainfed	Good for global comparability	Better for regional assessment	Best for local insights	Dependency	Impact	Risk
In-field	Water withdrawals	X		National statistics Subnational statistics	Metering or telemetry data obtained by farmer	X	X	X
	Water consumption	X	X			X	X	X
	Nitrogen loading to water	X	X		Modeled on farm	X	X	X
	phosphorus loading to water	X	X			X	X	X
In the watershed	Water stress	X		Regional assessments	Local assessment		X	X
	Groundwater table decline	X					X	X
	Nitrogen & phosphorus loading limits in freshwater bodies	X	X				X	X
	Drought risk	X	X					X
	Flood risk	X	X					X

Notes: ^[1]Not open source; requires license.

^[2]Online tool use (GIS data not available for download).

Source: authors

Appendix B2: Recommended methods

Assessing water-related DIROs for agricultural products		Data granularity		
		Good National (e.g., country)	Better Subnational (e.g., watershed, state, province)	Best Local (e.g., region, city, town, farm)
Locate	Origination location and volume	<ul style="list-style-type: none"> Use agricultural product production or yield maps (e.g., EarthStat, MapSPAM) to estimate the location of agricultural product sourcing volume within countries Overlay distributed agricultural product sourcing volumes with watersheds, states, or province maps to locate sourcing volumes 	<ul style="list-style-type: none"> Use agricultural product production or yield maps (e.g., EarthStat, MapSPAM) to distribute agricultural product volume across watersheds, states, or provinces and locate the origination of sourcing volumes 	<ul style="list-style-type: none"> With mill location data, use sourcing radius to locate sourcing areas surrounding mills With farm, field, region, zip code or other sourcing location data or shape files provided by supplier, use specific location provided by supplier
		Good data with global comparability	Better data from regional assessment	Best data from local insights
Evaluate	Dependency	<ul style="list-style-type: none"> Identify crop/product- and region-specific factors on green water footprint, blue water footprint, N and P emissions from global databases Estimate absolute water footprint and nutrient emissions by multiplying the footprint and emission factors by volume sourced 	<ul style="list-style-type: none"> Identify crop/product- and region-specific factors on green water footprint, blue water footprint, N and P emissions from regional reports/studies Estimate absolute water footprint and nutrient emissions by multiplying the footprint and emission factors by volume sourced 	<ul style="list-style-type: none"> Use metering or telemetry data provided by farmers (farmer consent required), or Telemetry data provided by third parties such as water agencies, irrigation districts and/or relevant agricultural technical service providers.
	Impact	<ul style="list-style-type: none"> Identify thresholds from global datasets for sustainable water withdrawal and nutrient emissions Estimate excess withdrawals and emissions by comparing local watershed conditions against the identified thresholds 	<ul style="list-style-type: none"> Identify thresholds from regional datasets or regulatory requirements for sustainable water withdrawal and nutrient emissions Estimate excess withdrawals and emissions by comparing local watershed conditions against the identified thresholds 	<ul style="list-style-type: none"> Identify thresholds from local datasets or regulatory requirements for sustainable water withdrawal and nutrient emissions Estimate excess withdrawals and emissions by comparing local watershed conditions against the identified thresholds
Assess	Risk	<ul style="list-style-type: none"> Assess risks using global models and databases 	<ul style="list-style-type: none"> Assess risks using region- or watershed-specific models and databases 	<ul style="list-style-type: none"> Assess risks using local models and databases

Source: authors

Appendix C1: Example of approach for prioritization (matrix)

2x2 matrix

A matrix is a practical approach to prioritize agricultural products and locations based on supplier volume and exposure to water risk.



Appendix C2: Example of approach for prioritization (MCA)

Multi-criteria assessment (MCA) framework

MCA frameworks can help companies prioritize agricultural products and locations based on how agricultural product, locations, and suppliers perform across a range of criteria that can be ranked individually and in aggregation, using averages or weighted averages to capture the relative importance of each individual criterion.

Multi-criteria ranking (from 1 to 5)

Agricultural product	Location	Supplier	Rank on composite index	Composite index
[agricultural product]	[location]	Supplier B1	1	14.24
[agricultural product]	[location]	Supplier A2	2	12.85
[agricultural product]	[location]	Supplier C5	3	12.61
[agricultural product]	[location]	Supplier D38	4	12.09
[agricultural product]	[location]	Supplier E9	5	12.05
[agricultural product]	[location]	Supplier A2	6	11.97
[agricultural product]	[location]	Supplier E10	7	11.91
[agricultural product]	[location]	Supplier E11	8	11.77
[agricultural product]	[location]	Supplier A5	9	11.66

Purchase volume	Spend	Water risk	Water intensity
4.66	4.54	4.85	4.89
3.75	4.62	4.43	4.58
3.94	5.00	5.00	3.66
2.67	4.27	4.73	4.92
2.83	4.85	4.66	4.47
3.86	4.39	3.97	3.93
3.40	4.69	4.69	3.82
3.24	4.58	4.08	4.20
4.39	4.47	4.58	2.75

Note: when relevant, other elements can also be incorporated (e.g., traceability, level of strategic importance, existence of ongoing programs)

Appendix C3: Example of approach for prioritization (VaR)

Value at risk (VaR) approach

Estimating value at risk (VaR) can help companies prioritize agricultural products and locations based on the value at risk associated with suppliers at each location.

Agricultural product	Location	Supplier	Water supply at risk (%) ¹	Profit (or revenue) at risk (USD) ²	Profit (or revenue) at risk (% of total)
[agricultural product]	[location]	Supplier B1	100.0%	19,700,000	11.3%
[agricultural product]	[location]	Supplier A2	100.0%	5,800,000	6.0%
[agricultural product]	[location]	Supplier C5	66.7%	4,500,000	3.6%
[agricultural product]	[location]	Supplier D38	50.0%	2,300,000	2.8%
[agricultural product]	[location]	Supplier E9	75.0%	2,100,000	2.7%
[agricultural product]	[location]	Supplier A2	100.0%	875,000	2.2%
[agricultural product]	[location]	Supplier E10	100.0%	750,000	2.2%
[agricultural product]	[location]	Supplier E11	100.0%	445,000	2.1%
[agricultural product]	[location]	Supplier A5	50.0%	90,250	1.8%

Notes: ¹ **Water supply at risk:** can be estimated based on the percentage of supplier water supply volume exposed to high or extremely high water stress or scarcity.

² **Profit (or revenue) at risk:** can be estimated based on the profit (or revenue) associated with the supplier volume and water supply risk.

Appendix D: Example action plan template

Objective / goal / target	
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Key action	Desired outcome	Deliverable / KPI	Due date	Cost range	Action owner
1.					<i>[role with responsibility to complete]</i>
2.					
3.					
4.					
5.					
6.					

Key stakeholder	Priorities / concerns	Impact & Influence (High, medium, low)
1.		
2.		
3.		
4.		

Project team

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Acknowledgments

This guide was made possible thanks to the financial support provided by Kilimo (<https://kilimo.com/>)

The authors would like to thank the external advisory group for their extensive insights, guidance and feedback during development of this document, including: Mary Rohatgi (Bunge), Nora Conry (Chadwicks Group), Kate Gibson, Michael Matosich, and Naabia Ofosu-Amaah (The Nature Conservancy), Coen van Iwaarden (Nature's Pride), Ruth Loftus, David Hagan and Michael Alexander (Diageo), Thérèse Rudebeck, Hannah Greig, Emma Clarke and Tara Padmore (WaterAid), Truke Smoor, Sara Walker (WRI), Mary Beth Cote-Jensen (PepsiCo Inc.), Paco Herrera (Heineken), and Angela Bowman (WWF). The insights, guidance and feedback of the external advisory group members reflect their individual perspectives and do not necessarily represent the views of all such members. Moreover, this guide may not necessarily reflect the views of each such member or their respective organization.

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Recommended citation

Reig, P., T. Luo, J. Stewart, J. Radke and A. Herod. 2026. "Accelerating water action in agricultural supply chains: practical steps for building supply chain water resilience." Bluerisk

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Cover Image: Nature's Pride in dialogue with its supplier Proagro about water management in the coastal areas of Peru. ©Nature's Pride.



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