

Agriculture



Fertilizer optimization: a win-win-win solution

Nitrogen fertilizer is the engine we need to feed a growing global population. But used in excess, nitrogen fertilizer is costly for farmers and costly for the planet. “Optimizing” fertilizer inputs can result in higher yields for farmers... and less pollution for our land, water and air.

Growing more food with less pollution

In just a few decades, there will be two billion more people to feed on the planet. Our challenge is to feed this growing population sustainably without depleting the soil, polluting our water and worsening global warming.

Nitrogen fertilizer is a farmer’s most expensive input. But in any given year, less than half of fertilizer is actually absorbed by the plants; that’s money lost for farmers operating on razor-thin margins. But fertilizer loss is also costly for the environment: it emits a greenhouse gas 300 times more powerful than CO₂, and runs off into the local streams and rivers as pollution.

Globally, agriculture is responsible for one-third of all greenhouse gas emissions.

One key solution is to improve the way fertilizer is applied to crops. The goal is to engage and enable farmers to use just the *right* amount of fertilizer on their crops, so they’ll get higher yields, spend less money and not have any excess escaping into our air, land and water.

Food companies, retailers, and other supply chain actors can help fertilizer optimization by signalling unified demand for scientifically sound and economically viable practices to improve fertilizer efficiency, soil health, and water quality.

For more than a decade EDF has been working with major retailers and food companies to promote sustainable agriculture and catalyse action to meet shared sustainability goals. [Contact us](#) for help!

Ways to engage with EDF

Use our “Greening the Agricultural Supply Chain” website

This resource will help you better understand the benefits of fertilizer optimization. The site includes strategies and case studies for examples of actions your company can take and programs that you can support.

Request a Sustainable Agriculture Phone Briefing

This briefing links you with EDF experts to discuss best practices in sustainable agriculture, including fertilizer optimization and manure management. We work with you in advance to ensure the proper focus for the discussion. Potential topics include:

- Agriculture Metrics and Environmental Impacts
- Understanding Best Practices and Industry Collaborations
- Setting a Fertilizer Optimization Goal

Join the Walmart Fertilizer Optimization Initiative or other industry collaborations

EDF can provide information or connect your company to industry collaborations like [Field to Market](#) or [Midwest Row Crop Collaborative](#) and services such as Land O’ Lakes [SUSTAIN™](#).

For more information about all the ways we’re greening the global shopping cart, visit us at:

supplychain.edf.org

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