

June 2023

# Deforestation

## Global Position

### Commitment

Nutrien opposes illegal deforestation and is committed to helping protect forests. Nutrien is committed to helping protect forests worldwide by leading the next wave of innovation and sustainability in agriculture. Our employees around the world are dedicated to feeding the future safely and with integrity each day. Nutrien supports sustainable practices across our sites, operations and communities. Nutrien sells products and services to help sustainably manage forests in addition to enabling sustainable agriculture production.

### The Issue

As the global population continues to grow, there is an increased need for more food, feed, fiber and fuel. Feeding a growing population is one of the world's greatest opportunities and one of its greatest challenges. To meet growing global needs, current and future agricultural production must be managed sustainably, with support from science-backed solutions that protect the environment.

Forests are geographically unique ecosystems that play a critical role in the global carbon cycle and support biodiversity. Although the contribution varies by region from 30 percent in Africa and Asia, to nearly 70 percent in Latin America, agriculture is the most significant driver of deforestation in tropical and subtropical countries<sup>1</sup>.

While Nutrien will maintain a strategic focus on the solutions we can facilitate through our business, deforestation is a shared challenge across both the industry and its supply chain and must be addressed through collaborative leadership within the agriculture sector. Nutrien participates in the Natural Climate Solutions (NCS) Alliance, which aims to scale-up affordable natural climate mitigation solutions for achieving the goals of the Paris Agreement on climate change. Climate mitigation solutions include reforestation, protection and conservation, livestock, animal and land management, and coastal wetland and peatland restoration, among a wide array of cost-effective options.

### Investing in Technology and Growers

The availability and adoption of new, improved technologies and agronomic practices supports improved yields on existing agricultural land. Nutrien's investments in innovative technologies and services is one integrated solution to this challenge. Our continual 2021 Research & Development investments have enabled grower access to the best solutions for sustainable production. In the US, land used in agriculture dropped from 54 to 52 percent of total nation-wide land area, while new technology adoption increased.<sup>2</sup> Based on consecutive 2020/2021 grain harvest reports from Brazil, harvested yields in all crops (rice, beans, corn, soybean and cotton) have on average increased or stayed the same, despite decreasing production acres. According to the U.S. Department of Agriculture, "This is based on the continued

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<sup>1</sup> <https://globalforestatlas.yale.edu/land-use/industrial-agriculture>

<sup>2</sup> <https://www.ers.usda.gov/topics/farm-economy/land-use-land-value-tenure/>

interest by Brazilian growers who have been investing in better use of land and optimal application of fertilizers.”<sup>3</sup>

As illegal deforestation continues to be a concern across the world and especially in Brazil. In 2022, Nutrien sponsored a Brazilian study, coordinated by CEBDS (Brazilian Business Council for Sustainable Development) in partnership with Imaflora, that analyzed the relationship between agri-food chains and deforestation. The study piloted satellite imagery and other georeferencing tools to evaluate whether illegal deforestation practices are occurring within local growing regions. The final report includes a geospatial analysis, a qualitative review of literature, an assessment of regulations in place, a summary of the role of various stakeholders in addressing the issue and includes case studies of several companies operating in Brazil and how they are helping address deforestation within their supply chains.

Our operations in Brazil are taking steps to help address illegal deforestation by using a third-party digital tool, to automate the screening of both new and existing grower customers for indications that they may be engaged in illegal deforestation activity. The screening tool provides information on socio environmental risks including those related to potential illegal deforestation from public databases (provided by Federal and State Environment bodies; among other databases). Nutrien screens the grower and if the database results indicate potential compliance issues, Nutrien will work with that grower and a third-party environmental consultancy firm to help bring change to their farming practices within a reasonable time period (and generally, no longer than a six-month period). If the grower does not agree to this engagement or meet the compliance in that expected time frame, Nutrien will no longer do business with the grower. This process is part of Nutrien’s efforts to help prevent illegal deforestation while educating and working with its customer base which we believe are important steps in supporting long-term solutions for combating deforestation.

Deforestation and forest degradation are estimated to be the source of up to 13 percent of greenhouse gas (GHG) emissions globally.<sup>5</sup> Farmers have the unique ability to use sustainable agronomic practices to store carbon within the soil. Nutrien’s comprehensive Carbon Program is intended to benefit growers and a broad base of value chain partners and stakeholders. It will enable the adoption of climate-smart agricultural practices that drive positive environmental outcomes while preserving the security of global food production. We are engaged in development of ecosystem services in agriculture to provide verified carbon reductions and removals. We have created opportunities for our grower customers to do this by developing our digital technology hub and by providing enhanced products and services to quantify and carbon footprints, including promoting enhanced carbon sequestration. Pilots for this program began in 2021 in North America. To date, those partnerships have resulted in many successful pilots resulting in approximately 685,000 pilot acres in 2022 across Canada and the US.

Additionally, Nutrien supports sustainable farm economics by providing large and small growers with technical and financial options to help them adapt to changing climate and market conditions. Nutrien provides the agronomic expertise, input and service options to help growers manage risk, maximize income and support transitions through demographic and global shifts. Nutrien uses our expertise, products, and influence to optimize crop quality and yields while providing opportunities for growers around the world to enjoy a sustainable livelihood.

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<sup>3</sup>[https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain%20and%20Feed%20Update\\_Brasilia\\_Brazil\\_BR2023-0001.pdf](https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain%20and%20Feed%20Update_Brasilia_Brazil_BR2023-0001.pdf)

<sup>5</sup> <https://crsreports.congress.gov/product/pdf/R/R46952>

### **Investing in Communities**

Nutrien recognizes the intrinsic value of protected areas. In the normal course of operations, if a planned project may impact protected land or species, or is subject to a regulatory review (for example: the Impact Assessment Act in Canada or the National Environmental Policy Act in the US), we work through proper permitting including measures to minimize potential impacts.

Nutrien also protects non-ag production lands through conservation and the reclamation and remediation of lands where Nutrien has or has had operations. We work with environmental authorities and properly restore land (post-mining) using local and native plant varieties, which can often enhance biodiversity. For example, since 2015 Nutrien and Canadian Wood Fibre Centre worked together to establish 27,000 trees on 19 hectares (47 acres) of closed gypstacks, and the trees are thriving. This effort represents the carbon sequestration potential of approximately 30 tons of CO<sub>2</sub> emissions per hectare per year.

Globally, Nutrien supports local community organizations that contribute to wetland conservation, sustainable agriculture, environmental education, water quality monitoring, wildlife management area restoration and wildlife habitat improvement.

### **Summary**

Nutrien continues to invest in the development of sustainable products and solutions to fulfill our sustainability commitments to our grower customers through our Nutrien Ag Solutions global retail network. We are committed to a sustainable solutions-based approach that provides tools which allow farmers to grow sustainably while protecting biodiversity, storing carbon and avoiding agricultural expansion, while helping to stem deforestation as a result of land conversion. In addition to our whole-acre solutions (products, services and programs), Nutrien seeks external local and global partnerships that provide a foundation for a more sustainable agriculture sector.

For additional information regarding Nutrien's ESG governance, risk management, strategic opportunities and performance related to water, please reference Nutrien's current ESG Report. [Download here.](#)