



Knowledge grows

# Yara's Position on Soil Health



## *The importance of soils*

Soils serve as the foundation for agriculture and our food system, playing a critical role in sustaining crop production and ensuring a sustainable future for farming. Yara focuses on the broader definition of soil health, viewing it as a living ecosystem crucial for the well-being of animals, humans, and the planet.

## *Soils are being degraded*

Approximately one-third of agricultural soils are degraded, posing risks to global food production and security. Soil degradation, caused by natural and human-induced processes, includes erosion, loss of organic carbon, nutrient imbalance, acidification, salinization, and sodification. Urgent action is needed to preserve and restore degraded soils through sustainable cropland management practices.

## *The vital role of balanced crop nutrition*

Balanced fertilization, a cornerstone of good agricultural practices, is essential for optimal crop growth and soil health. Yara emphasizes the importance of managing all plant nutrients to prevent soil degradation, highlighting the "Law of the Minimum", and advocates for responsible nutrient applications to prevent harm to ecosystems. ecosystem crucial for the well-being of animals, humans, and the planet.

## *Long-term trials—insights from Hanninghof, Germany*

A 65-year Hanninghof trial, part of 168 European trials, demonstrates that balanced nutrition, using N+P+K+Mg fertilizer alone

or with farmyard manure (FYM), enhances crop productivity, nutrient efficiency, and soil health. Initiated in 1958, this trial aligns with contemporary practices, emphasizing balanced nutrition to meet the 50% food demand increase by 2050 sustainably. Overall, the findings highlighted the importance of long-term adherence to balanced nutrition, which positively impacted crop productivity and sustainability, emphasizing the need for optimal nutrient management to meet growing food demands sustainably. Insights from the Hanninghof trial also provided practical evidence for sustainable crop production over an extended period.

## *The challenge of defining, measuring, and monitoring soil health*

Defining a universal framework for "healthy soil" remains challenging due to the dynamic nature of soils. Yara acknowledges ongoing initiatives, including its Soil Health Report, to establish standardized methods for evaluating and monitoring soil health. Global policies, such as the UNCCD 2018–2030 Strategic Framework, play a crucial role in promoting healthy soils and require collaboration among regulatory bodies, farmers, scientists, and the private sector.



## *Yara's position*

### **Soil matters**

Yara adopts a long-term perspective on soil health, providing farmers with tools and services for precise and balanced nutrient management. The company supports the UN Global Compact's Principles for Sustainable Soil Management through stakeholder partnerships, improved soil management, and inclusion in strategic planning. Yara's engagement includes general crop nutrition, research and development, soil health analytics, and digital farming.

### **Crop nutrition for the future**

Balanced crop nutrition is fundamental to Yara's approach, positioning the company to enhance soil health. Initiatives focus on research and development, commercial offerings for knowledge transfer, circular economy practices, and collaboration with partners to develop improved farmer income models and support industry sustainability.

