

# Transparent by Nature:

Akay Bioactives' commitment to sustainable sourcing and community impact.

How Akay Bioactives is advancing responsible agricultural practices, traceability, and transparency for the botanical ingredients category.





### **Executive Summary**

Akay Bioactives is redefining what it means to be a responsible ingredient supplier by embedding sustainability, traceability, and community empowerment into every facet of its operations. As part of Oterra, the world's largest supplier of natural colors, Akay Bioactives expands its global impact while maintaining a deep, local connection to its sourcing communities.

Here, we explore Akay Bioactives' journey toward transparent and responsible sourcing, its alignment with Oterra's global climate action strategy, and the tangible value delivered to customers across the health and wellness industries. Expect insights into traceability tools, responsible agricultural practices, and community engagement.

Continue reading to learn how Akay Bioactives' innovations help brands meet the rising consumer demand for the story behind the supplement.





## Akay Bioactives' Role in a Changing World

Consumer preferences are rapidly evolving. According to recent industry reports, 85% of consumers have personally experienced the effects of climate change, and 80% are willing to pay more for sustainably produced items. Traceability, cleanlabels, and environmental impact are no longer fringe considerations, but rather core expectations that shape brand loyalty and market success. Today, consumers demand more from their health

and wellness products, they expect transparency, ethics, and sustainability throughout the entire value chain of the products they purchase. In fact, 86% of consumers who report ingredient transparency as important also rank ingredient traceability as extremely or very important.<sup>2</sup> Botanical suppliers like Akay Bioactives now play a critical role in delivering on current consumer expectations.



# Two Legacies, One Shared Vision for a Greener Tomorrow

Akay Bioactives was born from the nutraceutical portfolios of two global leaders in the plant-based ingredient space—Denmark's Oterra and India's Akay Natural Ingredients.

As the world's largest supplier of natural colors, Oterra provides a strong foundation of global innovation and sustainability leadership. Guided by the belief that 'nature got it right', Oterra's mission is to make natural food and beverage more accessible through responsible sourcing, scientific rigor, and environmental stewardship.

With the combined offerings of Akay's Spiceuticals® and Oterra's NutriPhy® ranges, Akay Bioactives emerges as a science-driven industry leader with deep agricultural roots and a forward-looking vision.

- 1. PwC Global. PwC 2024 Voice of the Consumer Survey.
- 2. Morgan Myers, a G&S Agency. The Power of Brand Transparency in CPG Brands. 2024.



### Our Climate Action Journey

Bringing together the rich legacies of both companies, Akay Bioactives bridges the gap between local sourcing and global impact. As part of Oterra's climate action strategy, Akay Bioactives is aligned with science-based greenhouse gas (GHG) reduction targets, independently validated by the Science Based Targets initiative (SBTi), the most recognized organization globally for developing methods and criteria for effective corporate climate action. These targets are set on an absolute basis, which means reducing total impact even if the business is growing. These targets aim for:

reduction in Scopes 1 and 2

(direct and energy-related

reduction in Scope 3 by 2030 (value-chain emissions)



We are proud to report meaningful progress toward these goals. From 2022 to 2024, the Oterra group has already reduced direct emissions (Scope 1) by 20%, and overall emissions across all scopes have decreased by 11%. These achievements demonstrate strong momentum as we advance towards our 2030 targets.

These goals reflect a collective commitment to reducing emissions across both operations and value chain while supporting global efforts to mitigate climate change.



Sustainable Manufacturing and Responsible

**Agricultural Practices** 

Akay Bioactives is committed to a science-driven approach to mindful resource stewardship, which begins with reducing our environmental footprint. We pursue this goal through energy-efficient manufacturing, circular resource use, and continuous process optimization to minimize waste and reduce emissions.

100%

of the Oterra group's electricity and 40% of its total energy comes from renewable sources as of 2025. These efforts are just part of a strategic reduction in overall GHG emissions.

We are deeply committed to advancing sustainable farming through a range of established agricultural practices that promote soil health, biodiversity, and farm resilience. Our approach includes:

- •Integrated Pest Management: Employing biological pest control and minimizing chemical pesticide use to protect ecosystems and farmers' health.
- **Conservation Tillage:** Reducing soil disturbance to maintain soil structure and prevent erosion.
- •Crop Rotation: Alternating crops to improve soil fertility, disrupt pest cycles, and enhance biodiversity.
- •Soil Health Management: Using composting and natural amendments to enrich soil and reduce synthetic fertilizer input.
- Water-Efficient Irrigation: Utilizing drip irrigation and rain-fed methods to conserve water and reduce groundwater depletion.

These specific practices help farmers adapt to climate challenges while improving biodiversity and resource conservation. By fostering these time-tested, regenerative agricultural methods, Akay Bioactives strengthens local farming communities and advances environmental resilience.



### CurQfen®: A Case Study in Transparency

At Akay Bioactives, transparency and traceability are deeply rooted in the journey of CurQfen, our flagship patented and clinically substantiated curcumin complex. Derived from turmeric (Curcuma longa L.) and fenugreek (Trigonella foenum-graecum), CurQfen is not just a product of science, but also of conscious sourcing and environmentally responsible farming. The turmeric used in CurQfen is cultivated through Akay Bioactives' integrated farming programs in India and Cambodia, which ensure traceability from farm to formulation. In the cultivation of turmeric for CurQfen, contract farmers employ the practices mentioned in the Sustainable Manufacturing and Responsible Agricultural Practices section, all of which help to preserve biodiversity, maintain soil integrity, and promote responsible water use.

Akay Bioactives' commitment to a full-circle value chain doesn't end with cultivation, harvest, and manufacturing; it also extends to rigorous clinical substantiation of ingredient safety, efficacy, and mechanisms of action. To date, CurQfen is supported by over 25 compelling studies demonstrating its ability to support brain, liver, joint, and heart health.

By merging science with sustainability, Akay Bioactives ensures that CurQfen is a product that supports not only human health, but also the health of our planet. Through every link in our value chain, Akay Bioactives is working to shape a more transparent, resilient, and effective future for botanical ingredients.



Fenugreek, the other key component of CurQfen, is a legume known for its natural nitrogen-fixing ability, improving soil health and reducing the need for chemical fertilizers. This enables more sustainable cultivation practices that lower environmental impact while supporting farming communities through improved yields and higher-value crop production.



# Traceability You Can Trust

Akay Bioactives leverages next-generation traceability technology and farmer-level activation to monitor, document, and predict specific outcomes within cultivation and harvest. At the core of our system is Trace AgTech, a powerful digital platform used to geotag farms, monitor crop activities, and track responsible agricultural practices in real time. Integrating data from farm details, field diaries, sustainability protocols, crop management, and yield performance, this technology enables Akay Bioactives to oversee each stage of the growing process within contracted farms and respond proactively to challenges and opportunities for continuous improvement.

Included in the system
turmeric
farmers

495

chilli
farmers

Currently, more than 400 farmers across 1,500+ acres of farmland are included in the Trace AgTech system. Through this digital infrastructure, we not only improve the quality of turmeric and chili cultivated in these regions but also ensure that farming practices align with responsible agricultural practices including soil conservation, reduced synthetic chemical input, and better income for growers. This end-to-end traceability system enables Akay Bioactives to offer exceptional supply chain transparency while reinforcing our commitment to environmental sustainability and farmer empowerment.

# **Driving Local Impact**

Akay Bioactives sources many of its marquis offerings from smallholder farmers in India and Cambodia, building relationships that foster shared prosperity and environmental sustainability. Through contract farming agreements, we provide guaranteed buybacks for the 'right quality' raw materials produced by farmers to ensure financial security and market stability for our growers.

One of our flagship sustainability initiatives, the One Million Trees campaign that aims at planting and protecting 1 million trees at our premises and partner farms. As of 2025, these efforts have resulted in nearly 300,000 trees planted.

On the water conservation front:

of our contract turmeric of our contract turmeric farmers in Karnataka state use rain-fed drip irrigation.

Resulting in a:

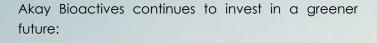
reduction in water usage for turmeric cultivation.







### Looking Ahead: Innovation & Partnership



- Utilizing Trace AgTech technology for real-time environmental metrics to improve yield forecasting and sustainability analysis
- Driving decarbonization efforts in line with the latest climate science
- Collaborating openly with customers to co-create clean-label solutions, from seed to supplement





