

A Legacy Founded in Integrity & Innovation™

# 2024 Impact Report





# Sustainable Procurement Programs (SPP)

In cooperation with our manufacturing partners, Verdure Sciences® has established the Sustainable Procurement Program (SPP) to define and structure the plans for farmers to secure reliable, premium sources of income and resources while maintaining the sustainability of botanicals, local ecology and the people who grow & harvest the plants used in our proprietary ingredients.

The Sustainable Procurement Program (SPP) is an internal program first initiated in 2017 with the launch of the SPP: Turmeric (also called the Sustainable Turmeric Program (STP)) in the Southern region of India. Through Verdugration<sup>®</sup> and Verdure Cares<sup>®</sup>, we designed this initiative to encompass the sustainability of our people, plants, and planet allowing us to bring meaningful messaging to pillars of our mission.

Creating these programs and getting farmers to join ensures better livelihood for participants such as highlighting info on farmer retention, boilers, etc. Farmer retention is another means of being sustainable.

Retaining farmers in a program fosters long-term partnerships that promote sustainable agricultural practices, support local economies, and ensure consistent sourcing. It encourages the adoption of regenerative methods, reduces environmental impact, and builds trust and transparency in the supply chain. By investing in farmers, companies strengthen sustainability efforts while creating resilience and shared progress.







# **SPP: Bacopa**

Farmers who previously cultivated millet and rice have transitioned to growing bacopa, a crop that offers the unique benefit of not attracting grazing animals such as cows and wildlife–providing greater peace of mind and improved crop security.

The program also supports local livelihoods by creating consistent employment opportunities:

- 30-50 laborers are engaged routinely throughout the season
- During harvest, the number rises to 70-80, positively impacting 50-60 families with reliable income
- Farmer retention rate 2019 to 2023 was 100%, from 2023 to 2025 retention rate decreased to 75% 80%

To enhance product quality and processing efficiency, the program utilizes polyhouse drying technology:

- Reduces drying time by 50% compared to traditional sun drying
- Increases seasonal yields
- Minimizes fungal contamination (mycotoxins) by ensuring uniform, complete drying in a controlled environment

The entire farming cycle is managed by a community-based farmer group, which oversees operations from sowing to harvest. Support is provided at every stage:

- Plant material is distributed free of cost to all participating farmers
- Labor assistance is coordinated by the farmer group based on individual needs
- A custom nutrient mix, tailored to soil conditions, is also supplied free of charge
- Packing materials are provided at no cost to the farmers
- To further strengthen post-harvest infrastructure, warehouse capacity has been expanded to store up to 250 metric tons of dried bacopa, ensuring year-round supply chain efficiency and reduced waste















# **SPP: Turmeric**

The sustainable turmeric program (known as SPP: Turmeric) continues to expand with a strong focus on regenerative agriculture, soil health, and farmer engagement. Seed quality and purity are consistently monitored, supported by a team of on-site agronomists-three currently active, with an additional expert recently brought on board.

To support long-term soil fertility and crop performance, the program emphasizes:

- Soil enrichment through the application of booster mixes and natural minerals
- Crop rotation practices using sesbania, horsegram, cowpea, and banana to rejuvenate soil health
- Improved curcumin content, resulting in higher yields and greater resistance to disease

Farmers are also supported through ongoing education and resource access:

- Farmer trainings and regular meetings to share best practices
- Manual weed management techniques to prevent seed spread
- Improved post-harvest processing, ensuring quality is preserved after harvest

Currently, the program benefits 441 farmers across 902 acres. It continues to grow, with trials underway to expand into East Africa–early results from these pilots show promising potential for broader adaptation and diversification of the turmeric model.











Top left image: Grafting for plant propagation uses the mature 'Mother Tree' as the main source for cuttings or grafting material to grow new plants.

## **SPP: Pomegranate**

The sustainable pomegranate program, launched in collaboration with a local manufacturing partner, has made significant progress since its inception in June 2024. The initiative aims to enhance farmer participation, expand cultivation acreage, and reduce environmental impact through improved processing methods.

- June 2024: Program launch with the distribution of 28,000 plantlets to 40 farmers, covering 75 acres
- February 2025: Goal met-30,000 plantlets distributed to 44 farmers, expanding the program to 80 acres
- September 2026: First commercial harvest anticipated
- 2027: Targeting optimal harvest yields through continued agronomic support
- Water Efficiency: Introduction of a new pomegranate fruit processing machine has resulted in a 50% reduction in water waste







### **SPP: Boswellia**

The *Boswellia serrata* planting initiative was completed in 2023, and ongoing efforts are in place to ensure the healthy growth of saplings under a three-year maintenance and monitoring agreement facilitated by the Forest Department. This project is part of a broader initiative to support reforestation and community livelihoods in Madhya Pradesh's Sheopur district.

- Tree survival rate currently stands at approximately 50%, with the area now well protected and fenced; Encouragingly, the land is showing signs of natural regeneration of *Boswellia serrata* plants
- Boswellia serrata, also known as salai, is native to India's dry deciduous forests; Its oleo-resin, harvested as salai-guggul, is a valuable non-timber forest product (NTFP)
- The Sahariya tribe, an Indigenous forest-dependent community, relies on this resin for a significant portion of their livelihood
- This initiative not only contributes to the conservation of native species but also enhances the economic stability and well-being of local communities through sustainable harvesting practices

Through ecological restoration and community-led forest stewardship, the program demonstrates how biodiversity conservation can directly support rural livelihoods and cultural preservation.



#### 2019 Ideation of boswellia plantation project and initiation of

communication with MP Forest Department (MPFD)

**JAN 2020** 

VI ×

In principal approval from the forest department after successfully projecting, justifying, and defending our goal of holistic sustainability

#### FEB 2020 Joint agreement with MPFD; first batch of boswellia plantation initiated with the <u>help of first installment of grant</u>

### **OCT 2020**

Progress report on the plantation, attle protection wall, and irrigation facility development; Training imparted to trial communities on sustainable harvesting practices

#### **JUN 2021**

Received progress report of plantation and protection wall; Second batch of boswellia plantation is done; Disbursement of second installment of grant

#### 2022 - 2023

Third batch of plantation done and disbursement of final installment of grant; ~7500 Boswellia plants flourishing in 25 hectacres of land



# Sustainability Highlights this Year



#### From soil to shelf, we're measuring what matters

Verdure has proudly launched the first phase of an exciting Life Cycle Assessment (LCA) initiative focused on one of our key botanical ingredients. By mapping the environmental footprint from cradle to gate-including farming, harvesting, and processing-we're gaining powerful insights into the true impact of our supply chain. This marks a significant step forward in our commitment to data-driven sustainability, empowering us to identify high-impact opportunities for reducing emissions, improving resource efficiency, and driving long-term positive change across our operations.

#### **Field insights from India**

On the ground our farmer partner serves as the farm head, managing operations across 20 farms and approximately 40 acres. With a background in pharmacy and additional expertise in finance and technical operations, our farmer partner is supported by a strong family network and regularly receives guidance from horticulture experts and scientists affiliated with institutions such as CSIR-CIMAP, ICAR-DMAPR, and Anand Agricultural University. His collaboration with Verdure has led to the successful implementation of various sustainability initiatives, including polyhouse installations to enhance herb quality, on-site warehouse development for improved storage, soil health improvements, and several ongoing efforts.

### Measuring our impact & setting goals for the future

With the support of a strategic sustainability partner, Verdure was able to calculate Scope 1 and Scope 2 greenhouse gas emissions per kilogram of product produced. This collaboration has enabled greater visibility into operational emissions and will help guide future reduction strategies and reporting efforts.

#### Stories from our supply chain

Dr. Mayur leads farm sustainability efforts at a key partner manufacturing facility in India. He holds an M.Sc., M.Phil., and Ph.D. in Botany, with specializations in Plant Taxonomy, Cytogenetics, and Plant Breeding, as well as a Master of Social Work (MSW) in Environmental Studies. Working closely with our farmer partners at the farm level, Dr. Mayur plays a pivotal role in advancing Verdure's sustainable herb programs, including initiatives focused on the cultivation of pomegranate, bacopa, and boswellia.

# 19 audits completed throughout the supply chain

Audits of each farm and/or ingredient are specific to the needs of the botanticals being grown, time of year, and more; however, they generally include items such as:

- Verification of farms & current state of farming practices
- Monitor & evaluate current state of the crop/s
- Interview farmers and identifying their needs so the support can be extended
- Confirmation of records



A Legacy Founded in Integrity & Innovation™

# 2024 Impact Report

USP Verified<sup>™</sup> is a registered trademark of The United States Pharmacopeial Convention (USPC). UEBT is a registered trademark of Union for Ethical Biotrade. Verdure Sciences<sup>®</sup>, Verdure Cares<sup>®</sup>, and Verdugration<sup>®</sup> are registered trademarks of Verdure Sciences<sup>®</sup>, Inc. For Verdure's patent and trademark information, please visit: vs-corp.com/ip | VS02112025-v5. © 2025. All rights reserved. All images and content are property of Verdure Sciences<sup>®</sup>, Inc.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease. Please note that the physiological activity of the ingredient(s) described herein is supported by the referenced clinical trial report(s). Marketers of finished products containing the ingredient(s) described herein are responsible for determining whether claims made for such products are lawful and in compliance with the laws of the country in which they will market the products.



