



Sustainable
HERBS INITIATIVE

SHI Toolkit

VERSION 3.0 · 2026

*Best Practices for Sustainable and Ethical Sourcing
in the Herbal Products Industry*



INTRODUCTION

Preface

This edition of the Sustainable Herbs Initiative Toolkit builds on years of work by SHI partners: farmers, wild harvesters, processors, brands, and advocates who are turning shared values into action. It codifies what we've been learning together: the assumptions behind how change happens and the practical steps involved.

From the start, SHI's goal has been to change the botanical industry from transactional to reciprocal relationships where value and respect flow in all directions. This work runs through every SHI gathering and working group. The work is grounded in the belief that every actor in the herbal value network has intrinsic worth and that healthy trade depends on healthy ecosystems and communities.

To ensure long-term vitality, we must take concrete actions that address climate change, biodiversity loss, and poverty. Each company at every stage of the value network has a role to play.

THIS TOOLKIT ASKS:

- What are concrete tools we can use to implement practices that support and respect stakeholders through the sourcing network?
- How do we make visible the risks borne by different stakeholders and help reduce those risks?
- What can each of us do to build resilience rather than extract it?
- How can our actions become examples for others?

Our shared goal is to develop industry-wide best practices that strengthen trust, transparency, and shared prosperity throughout the herbal value network. We recognize that these practices are aspirational and that achieving them is a journey. The Sourcing Self-Assessment can be a good place to begin as it invites you to outline a step-by-step approach to introducing these practices.

"The purpose of this toolkit is to document what's working, sharing practices that translate learnings into everyday decisions."

SHI • 2026



2024 SHI Learning Journey in Oregon

NAVIGATION

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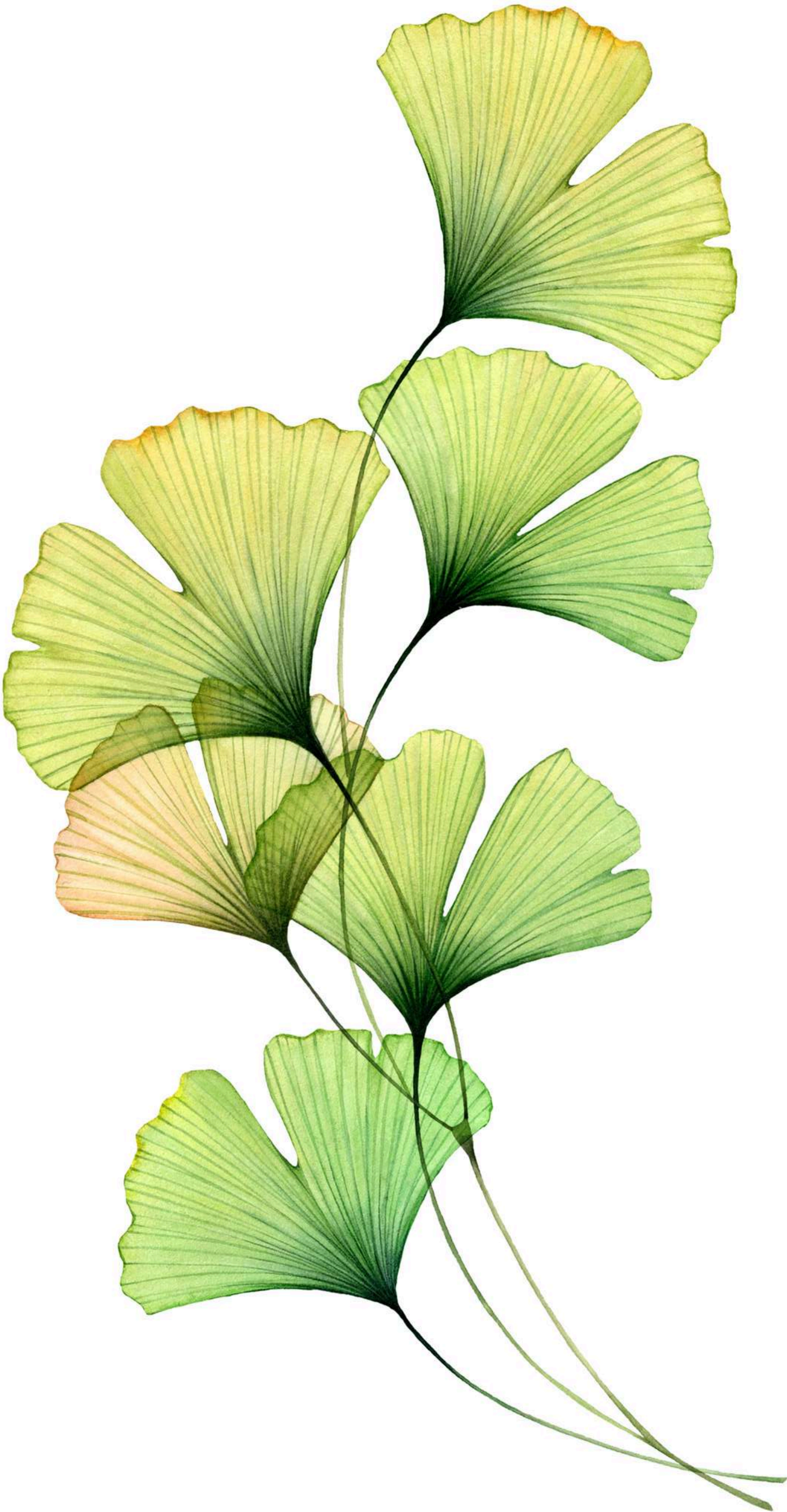
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Sitting with plants, circle at the SHI Oregon Learning Journey 2025



CHAPTER ONE

SHI Core Practices

The principles and practices that guide how SHI creates the conditions for deep listening, authentic relationships, and transformative action throughout the herbal value network.

"The secret is not how you manage the land or the technology you use. The secret is the heart with which you manage it."

LYLA JUNE JOHNSON • EXPOWEST, 2024

"It would be sick and twisted if in harvesting the medicines from this region and selling them to others, this community isn't healed."

LORI BRISCOE • APPALACHIAN TEA AND BOTANICALS



SHI began by asking what is needed to do business in a way that truly honors people, plants, and place so that life is supported from the source to the finished product?

We have found that the answer begins in the attention and intention brought to one-on-one relationships. The questions then become:

- What does it take to develop and nurture relationships based on respect and partnership rather than extraction and exploitation?
- What are the conditions needed to develop and nurture these non-transactional relationships in global trade?
- What is needed to create and sustain those conditions?

This toolkit offers concrete tools, templates, and best practices to demonstrate how to apply these values on the ground. Yet, as Lyla Johnson says in the opening quotation, the secret is not in the tools themselves but in the heart with which you manage those tools.

The SHI virtual Learning Labs and in-person Learning Journeys are where we create the conditions that allow participants to show up with their whole selves which in turn allows us to lead with our hearts. Below are the key principles and practices that guide this work. The work doesn't end here, but this is where it begins.

Awe and Gratitude

Begin from a place of awe, gratitude, and respect. Spend solo time to connect with the place where we are (in-person gatherings). Find our own way to introduce ourselves to that place and share our intention. Spend solo time with plants, finding our way to introduce ourselves to the plant and communicate in a way that feels authentic to us.



Intention

In an opening circle, each participant shares their intention. This creates a container for our time together that is built from shared engagement and participation.

Connecting to Place and Past

Whenever we gather for in-person gatherings, we have someone from the area or who knows the area introduce this place to us, the history of the land and the history of the people who lived on this land. This helps us understand and respect: Who lived here? What happened? What did they know? Where are they now? And allows us to move through that landscape with respect for the past.

Connecting to the Plants

SHI members are herbal product companies that are rooted in the vision and values of plant based medicine. These systems of healing arise from a deep sense of respect for and awareness of being in relationship to the aliveness of the world. We keep these values at the center of our work. Some practices for doing this include:

- Begin monthly meetings by connecting with the plants in some way. This can be through guided visualizations, a moment of silence, or whatever you feel connects you in this way.
- At in-person gatherings, spend time one on one with plants, intentionally connecting with the whole plant and bringing in the aliveness and spirit of that plant, seeing the plants as living entities first, not as raw material or product.

Listening

"Changing the way we listen sounds like a small thing. But when you change how you listen, you change the quality of your relationships, the quality of your experience, and the quality of the experiences of those around you. And when you change those things, you change, well, everything."

OTTO SCHARMER • PRESENCING, 2025

Listening is central to SHI's approach. What arises in each of us and in our work together from listening deeply to the people, plants, and places we visit, to each other, and to ourselves? In addition to listening to the plants and the places where we are, this means listening to voices of all stakeholders involved, especially those not often heard or not allowed to speak in global trade. Below are some guidelines.

PRACTICES

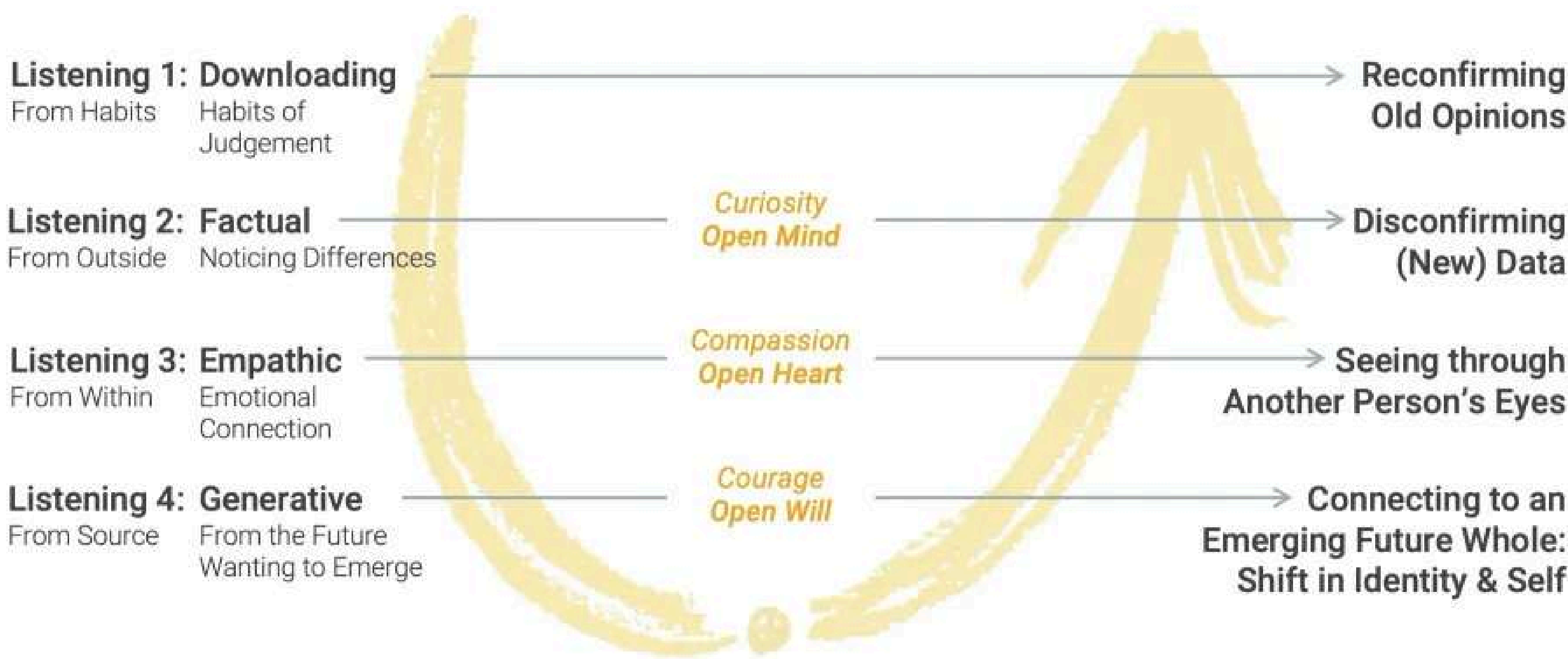
Listening — Become aware of the 4 levels of listening and how they operate in your interactions and work. Pay attention to how you listen. Are you listening to speak? To understand? To empathize? To listen to a future that is trying to emerge?

Dialogue Walk — Go on a 20 minute walk with someone in your company whom you don't know or don't know well. Each share for 10 minutes while the other listens. The other person can ask clarifying questions but your role is primarily to listen. Topics can be: speak about 2 or 3 life events or people that most inform who you are now and why you are doing what you do. Or share 2 or 3 events or people in the last 5 years who most inform what you are doing and why it matters to you.

Stakeholder Interviews — Seek out the voices and perspectives of those in your company or the industry with whom you don't often interact, those who are not often included in the circle, or those who don't always speak up in group meetings.

At in-person and virtual gatherings, try to bring in different stakeholders and ensure there is room/space for them to share their perspectives.

Four Levels of Listening



Presencing Institute © licensed under CC BY-SA 4.0

Farmer and Wildharvester Visits

Unlike supplier visits where a company is visiting to see whether a supplier meets their quality standards, the intention of these visits is to experience and understand the perspectives and challenges of the farmers or wildharvesters. It matters how these visits are set up to ensure that that outcome is accomplished.

On the SHI Nicaraguan Learning Journey, groups of four or five individuals visited a farmer and their family. After introductions, we did a small work project that was helpful for that family. On another farmer visit, we prepared lunch and then ate with the family. We brought products to share as gifts. Conversations about farming arose but those weren't the focus of why we were there nor did they guide our questions and conversation. As Matt Richards, Organic Herb Trading, said, it was very different to visit farmers to connect with them rather than see if they were compliant.

Embodied

Have in-person gatherings in locations where it is easy to be outside and then be outside as much as possible. Include some type of physical work that both helps experience physically the work of those we are visiting and gets everyone out of their heads and into their bodies.



Dinner at Oshala Farm, SHI Oregon Learning Journey 2025

Reflection

It can be challenging to listen to ourselves, especially in the busyness and structure of sourcing herbs or leading sustainability departments. Pausing to reflect, by journaling on a key question or on a guided visualization can help us listen to our own voice, remember our own values, and enter our work from a more centered and grounded place.

After field visits, gather in a circle to reflect on the experience. Invite a simple prompt like asking what is alive in people or what surprised them or to just share how they are feeling. This can be hard to make the time for. People may be tired, you may be behind schedule, or any number of reasons why it seems easy to skip. Don't. These conversations always reveal interesting insights. They also deepen listening skills and relationships among everyone overall.

"These conversations always reveal interesting insights. They also deepen listening skills and relationships among everyone overall."

Ann Armbrecht, SHI Founder and Director

Relationships

Create opportunities to connect as whole people. When there are long drives (anything over 30 minutes), create groups that change for each segment of the drive and prompt the groups with questions to reflect on. Make sure each person has some time to share before moving on or opening the conversation.

Note: We spend a fair amount of time creating these groups and making sure people rotate. This makes a difference in the overall quality of group interaction. These conversations create points of connection between people which helps prevent cliques from forming.

Taking Action

We are here to change the system and so taking action is key. Our goal is to take that action from a deeper, more centered place, where we listen to the voices of those in the system, to the land, to the plants, to ourselves, and where we try to understand the system. We identify small actions to take to begin. And then we take them.

Systems Awareness

We are working to bring about systemic shifts. Doing that requires understanding that system: Who are the stakeholders? What are their values? What is at stake for them? What other forces are present in the system? What are the blinders? What are the levers of change?

We practice this through 3D mapping practices used by Theory U and the Presencing Institute. [This Presencing Institute guide](#) outlines the process.

Courage

This work can take courage. Ask: If I had 25% more courage, what would I do? And then begin doing it.

Have Fun!

We laugh, a lot. And we care for each other deeply. This care and connection builds as new participants join. Helping them feel welcome is key!

The tools that underlie our approach can be brought to any type of company, at any size.

SHI 5 Sourcing Principles

At SHI we recognize that the long term supply of the raw materials on which our companies rely depends on ecologically, economically, socially, and culturally resilient source communities. SHI members commit to these sourcing principles as guideposts of best practices to work toward building wellness and resilience in the human and ecological communities from which our company sources herbs.

This document outlines best practices to work toward this long-term ambition.



Graphic designed by [For Good Studio](#)

OUR COMMITMENTS

The Five Principles

1 TRACEABLE SOURCING PRACTICES

Get as close as possible to the farmers, wild harvesters, and processors who harvest, grow, and process the herbs with which you make your products. Knowing the social, environmental, and economic conditions that producers and processors face is essential to taking responsibility for the impacts of your purchasing practices and for implementing meaningful action.

2 FAIR PRICES

Commit to making purchasing decisions based on quality and relationships rather than pressuring on price. While not perfect, we believe third-party verified certifications with premiums are one strategy companies can use to ensure they're investing in the long-term human and ecological health and resilience of the communities from which they source.

3 DEVELOP COLLABORATIVE RELATIONSHIPS

Think of supplier relationships as a partnership based on mutual trust and transparency rather than a transactional relationship. Commit to understanding and sharing risks, working through challenges together, and developing long-term plans and goals.

4 INVEST IN PROFESSIONAL DEVELOPMENT AND TRAINING FOR PRODUCERS

Invest in professional development and training for producers and processors to improve material quality, create marketable, scalable products for commercial selling, and provide greater meaning to the work for farmers, wild harvesters, and processors.

5 INVEST IN RESEARCH

Use data to guide decisions and strengthen company practices over time. Support research that helps connect quality, sustainability, and livelihoods across the supply chain. Research helps companies see clearly what's working, what's not, and where to focus investment for lasting ecological and economic resilience. Key areas could include:

- How farming and processing practices affect constituent levels and yields.
- Sustainability of wild harvesting on plant populations.
- Impacts on constituent levels of bringing wild plants into cultivation.
- Impacts of climate change on yields and constituent levels.
- Emissions data, especially Scope 3, to understand true environmental costs.
- How certifications influence ecosystem health and rural livelihoods.
- Ways to manage and reduce risk across sourcing networks.





Spreading ginger to dry, Nepal

CHAPTER THREE

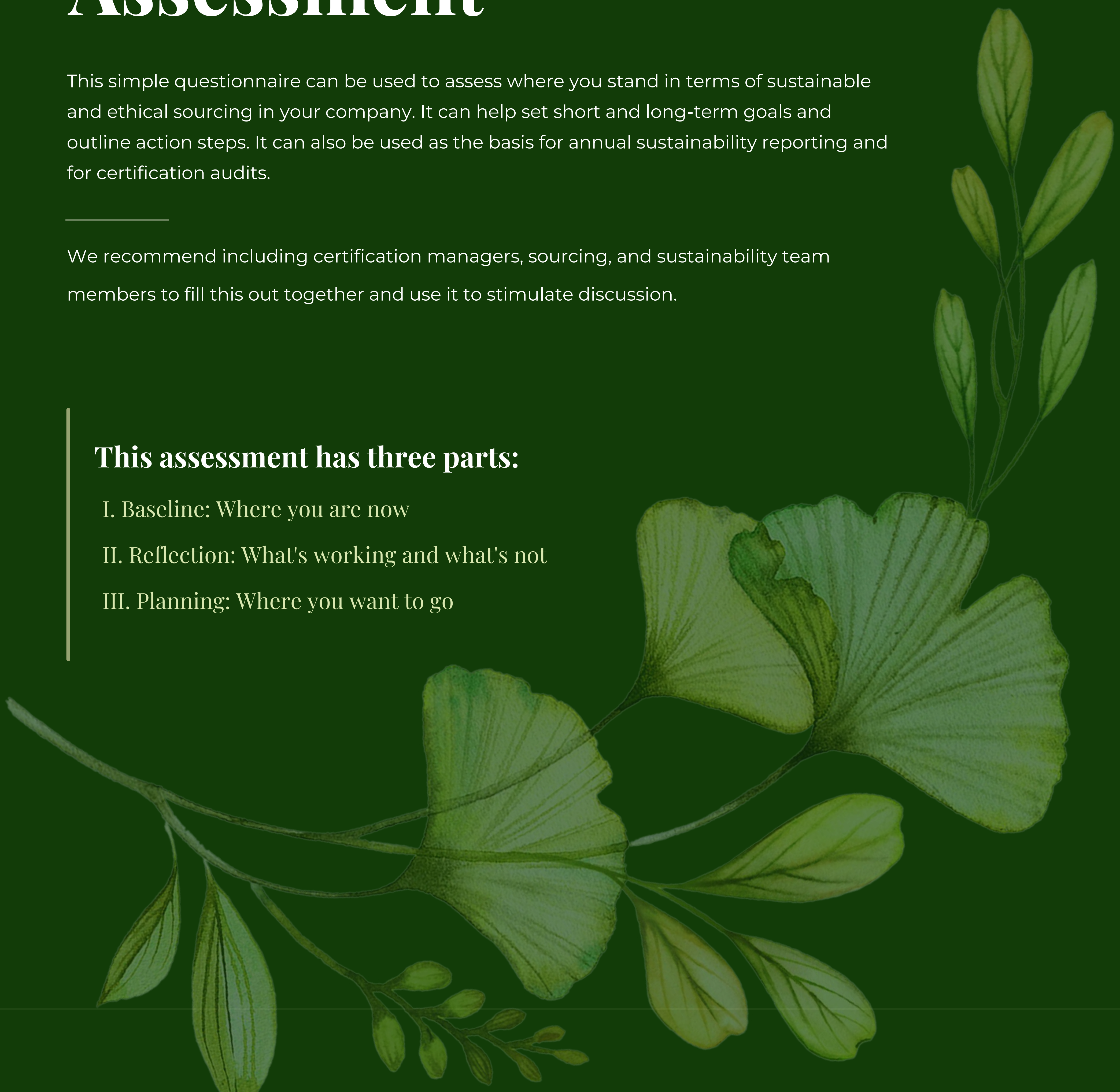
Sourcing Self-Assessment

This simple questionnaire can be used to assess where you stand in terms of sustainable and ethical sourcing in your company. It can help set short and long-term goals and outline action steps. It can also be used as the basis for annual sustainability reporting and for certification audits.

We recommend including certification managers, sourcing, and sustainability team members to fill this out together and use it to stimulate discussion.

This assessment has three parts:

- I. Baseline: Where you are now
- II. Reflection: What's working and what's not
- III. Planning: Where you want to go



PART I – BASELINE: Where are you now?

2. SUSTAINABILITY

For the purposes of this assessment, sustainably sourced may include environmental stewardship, social responsibility, economic viability, and long-term supply resilience.

2a. How do you define "sustainably sourced"? (Check all that apply)

- ☐ Internal impact assessments and performance indicators
- ☐ Third-party certifications addressing environmental, social, and/or economic sustainability (e.g. Biodynamic, Regenerative Organic Certified, Fair for Life, FairWild)
- ☐ Internal traceability systems (batch records, supplier documentation, lot tracking)
- ☐ Other criteria or tools (please describe):

2b. What percentage of the herbs you source do you currently consider sustainably sourced?

- ☐ 0%
- ☐ < 25%
- ☐ 25–50%
- ☐ 50–75%
- ☐ > 75%

2c. What makes these materials sustainable?

(For example: farming practices, certifications, long-term relationships, pricing structures, investments made at source.)

2d. What percentage of your total annual botanical purchases (by weight) are covered by third-party sustainability standards?

Materials may fall under more than one standard.

SUSTAINABILITY STANDARD	% SOURCED
Demeter Biodynamic Farming and Processing	
EU Regulations on Organic Production	
USDA National Organic Program (NOP) Organic Agriculture Standards	
EcoCert Fair for Life (FFL) Social & Fairtrade Standard	
Fairtrade International (FLO) FairTrade Standard Herbs, Herbal Teas & Spices	
Fair Trade USA (FTUSA) Agricultural Production Standard (APS)	
FairWild Foundation (FWF) FairWild Standard (FWS)	
Rainforest Alliance (RA) Sustainable Agriculture Standard	
Regenerative Organic Certified (ROC) Framework	
Union for Ethical BioTrade (UEBT) Ethical BioTrade Standard	
UEBT/Rainforest Alliance Herbs & Spices Program	
Other	

(Look at your annual purchase report and see what % of the botanicals you have sourced falls under each category)

2e. What percentage of your sourcing would you like to be sustainably sourced in the future?

- ☐ < 25%
- ☐ 25–50%
- ☐ 50–75%
- ☐ > 75%

3. TRANSPARENCY AND TRACEABILITY

Traceability refers to your ability to track material back to the farm or wild-collection site. **Transparency** refers to how much information is available, shared, and verified along the chain.

3a. How do you purchase your botanical materials? (Check all that apply)

- ☐ Self-produced (own farms or wild-collection operations)
- ☐ Directly from farmers or wild-collection groups
- ☐ Through brokers or traders with limited or no traceability
- ☐ Through brokers or traders who provide transparency back to source
- ☐ Through processors (cut & sifted, powdered, extracts, essential oils, etc.)
- ☐ Open market purchases with no traceability
- ☐ Contract manufacturers with no traceability
- ☐ Contract manufacturers with traceability to source

3b. What percentage of the botanicals you source can be traced to the source?

- ☐ 0% ☐ < 25% ☐ 25–50% ☐ 50–75% ☐ > 75%

3c. How do you verify your suppliers? (Check all that apply)

- ☐ Supplier visits (in person)
- ☐ Third-party certifications or audits
- ☐ Internal supplier approval or verification process
- ☐ Photo or video documentation
- ☐ Peer or industry references

Which of these are done regularly (e.g. annually), and which are ad hoc?

3d. What is the approximate tenure of your supplier relationships?

(Estimate the percentage of suppliers by spend or volume.)

- ☐ < 12 months: _____ %
- ☐ 1–3 years: _____ %
- ☐ 3–5 years: _____ %
- ☐ > 5 years: _____ %
- ☐ Don't know

(Long-term relationships tend to enhance but don't always guarantee quality or sustainability.)

4. RISK ASSESSMENT

Risk assessments may be formal or informal. They can include desk research, supplier conversations, site visits, or country-level tools. Risks may be environmental, social, economic, or political.

4a. Do you have a methodology for assessing sourcing risks?

- ☐ Yes ☐ No

4b. For approximately what percentage of your raw materials do you have some form of risk assessment?

- ☐ 0% ☐ < 25% ☐ 25–50% ☐ 50–75% ☐ > 75%

4c. Do you use this information to identify opportunities to invest in or support sourcing regions?

- ☐ Yes ☐ No

PART II — REFLECTION: What's working and what's not?

5a. Overall, are you satisfied with the quality of the botanical materials you source?

☐ Yes ☐ No

5b. If not, what would you like to change? (Check all that apply and explain.)

AREA	EXPLANATION
☐ Quality	
☐ Price	
☐ Quality (testing etc.)	
☐ Relationships (vendor/manufacturer is not listening, meeting your needs, etc.)	
☐ Sustainability (i.e. product is not organic or fair certified, distance is too far, too much energy required to process the botanical, diminishing supply due to climate change, at-risk plants, etc.)	
☐ Other: _____	
☐ Nothing. They're exactly what you want.	Great! Share your success story so others can learn from you.



Harvesting chamomile at Oshala Farm

PART III — PLANNING: Where do you want to go?

6. TRANSPARENCY GOALS

6a. What are your 5-year goals for transparency and traceability?

6b. What is your 1-year goal?

6c. What actions can you take in the next 3–6 months?

6d. What is one concrete action you can take in the next month?

7. RISK MITIGATION GOALS

7a. What are your 5-year goals for risk assessment and mitigation?

7b. What is your 1-year goal?

7c. What actions can you take in the next 3–6 months?

7d. What is one action you can take in the next month?



Reflecting at the SHI Appalachia Learning Journey

8. SOCIAL RESPONSIBILITY

Social responsibility may include fair pricing, payment terms, pre-financing, labor conditions, long-term relationships, and/or certification.

8a. Are there one or two herbs where you are considering fair trade or similar certification? If not, how are fair trade principles reflected in your purchasing practices?

8b. What are your 5-year goals?

8c. What is your 1-year goal?

8d. What actions can you take in the next 3–6 months?

8e. What is one action you can take in the next month?

9. ENVIRONMENTAL RESPONSIBILITY

9a. Are you implementing or actively supporting any of the following? (At your company and/or through suppliers.)

- ☐ Carbon measurement or mapping

☐ Energy or water efficiency projects

☐ Organic production

☐ Regenerative agriculture

☐ Agroforestry
- ☐ Renewable energy (e.g. solar)

☐ Waste reduction initiatives, including recycling, composting, and zero waste goals

☐ More eco-friendly packaging

☐ Other

9b. What are your 5-year environmental goals across sourcing, processing, and packaging?

9c. What is your 1-year goal?

9d. What actions can you take in the next 3–6 months?

9e. What is one action you can take in the next month?

Review this assessment annually. Use it to track progress, guide supplier conversations, and identify one or two priorities to work on internally or through SHI working groups. Progress comes from consistency!

Reframing the PPP Unit

This section is based on a presentation by Guido Masé, Head Formulator for Traditional Medicinals, on Strategic Formulations. It is written as a guidance document for developing more equitable relationships between brands and suppliers.



Buyers from Martin Bauer and Yogi meet with educators from the Himalayan Permaculture Center and partners at Organic Valley, Pvt Ltd, Nepal to discuss a joint regenerative farming project.

The PPP (People–Plants–Place) unit is the foundation of sustainable herbal sourcing. Instead of viewing herbs simply as commodities, this approach treats the health of the PPP unit as THE "product." When the people, plants, and place are thriving together, the herbs they produce are believed to be potent, traceable, and regenerative.

"By beginning here, we make a subtle shift: letting the PPP unit lead the market, rather than always only bending it to fit market demands."

GUIDO MASÉ • HEAD FORMULATOR, TRADITIONAL MEDICINALS

Purpose

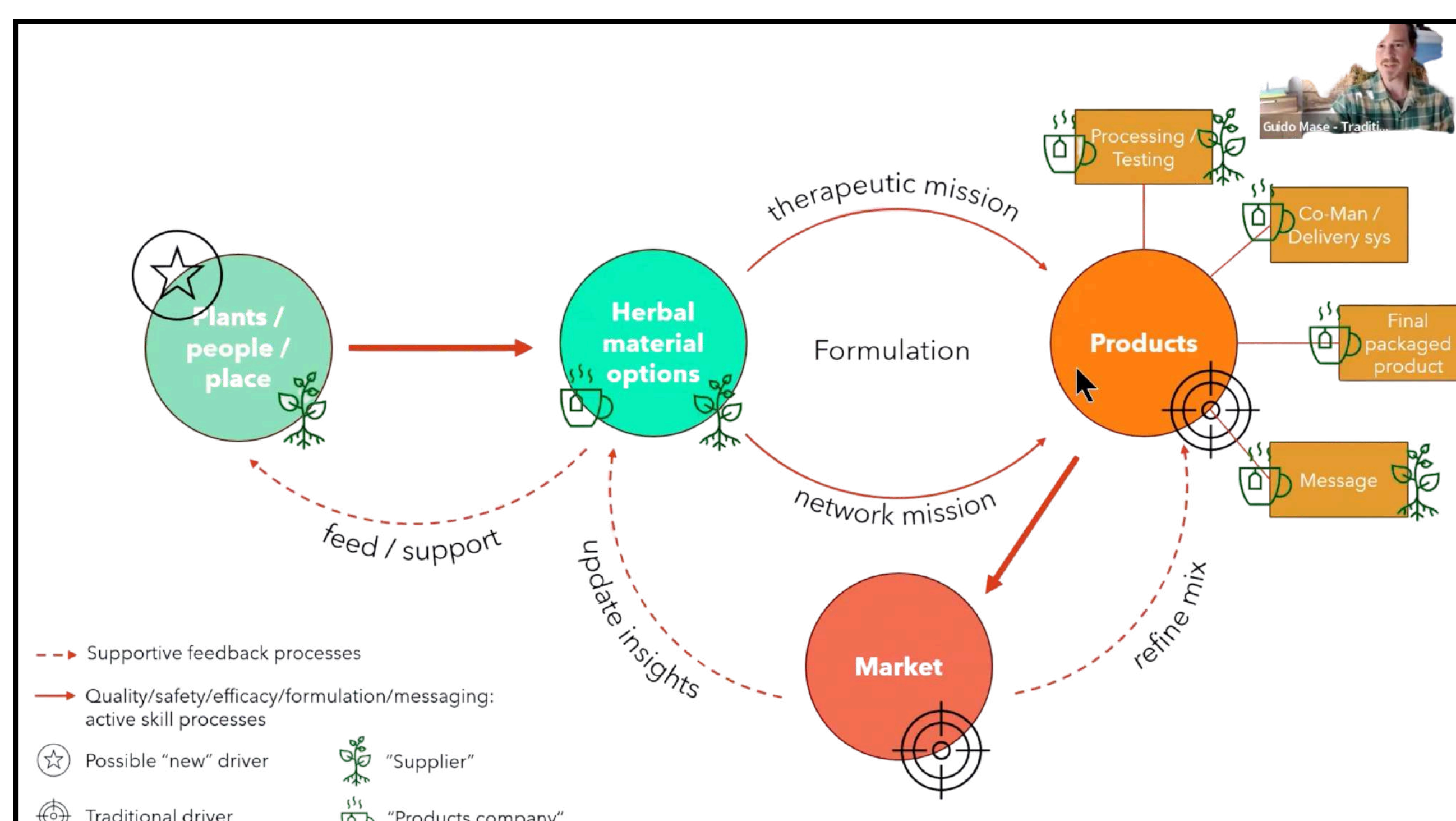
This model shifts the focus from short-term outputs (your products viz. capsules, teas, or extracts) to long-term relationships. Brands, buyers and suppliers all have a role in supporting the unit's ecological, socio-economic, and cultural well-being.

What success looks like

Products and the market are the typical drivers in product formulation. This model proposes instead that the health of the PPP unit drives, or at least informs, formulation and market development and that both the brand/buyer and the farmer/aggregator are responsible for supporting and nourishing that PPP unit.

Success means shifting the lens from "inputs and outputs" to relationships. The PPP unit is understood as a living socio-ecological organism and not as a mere link in the chain. Success looks like:

- Metrics capture ecological vitality and cultural continuity at the source, alongside income and volume at the "sink" (the retail market).
- Buyers and suppliers in continuous dialogue, adjusting together as conditions change.
- Start to think about farmer and vendor retention the same way we think about employee and customer retention: crucial for herbal raw materials that are very sensitive to context, climate, and expert growing / processing.
- Value flowing back into soils, families, and cultural life, and not only to the markets and end consumer. Building, feeding and supporting the source can give a voice to the PPP unit. Help guarantee safe, consistent products.
- Reactive to plants and not reactive to the market.
- Distribute risk in a new way: Instead of focusing on multiple suppliers for one ingredient to maintain product outflow, focus also on sourcing a diversity of ingredients for the same supplier to maintain source inflow. For the brand/buyer, this elevates the sustainability of the PPP unit to the same level as the sustainable production of the final product.



The PPP Unit as a Living Organism

A PPP unit should not be viewed as land or labor. It represents the people, plants, and place as a collective. Folded into this collective are elements such as traditional ecological knowledge (growing, harvesting, processing), multi-modal sustainability (financial, agronomic, but also educational, ecological, entrepreneurial, sociocultural), and external connections (government and NGOs, buyers and marketplace, research).

- People bring traditional knowledge, stewardship, and stories. People can help in understanding where the potency is and where it might not be. Plants contribute their phytoconstituents, biodiversity, and ecological services.
- Place is the context that grounds the work. It is how plants express their chemical profiles, how people maintain creative livelihoods, and how cultural and ecological patterns evolve. In turn, the activities of people and plants feed back onto place, over time contributing to a co-evolved whole.

People in the places where plants belong are part of the forces that have shaped the cultural practices, the medicinal applications of plants, and the landscape itself. People can be the link between local stewardship of place and the journey of the plant to the market. Health comes when all three are considered and respected.

PEOPLE	Traditional knowledge, stewardship, and stories
PLANTS	Phytoconstituents, biodiversity, and ecological services
PLACE	Context that grounds the work; chemical profiles, livelihoods, cultural patterns

Formulating with the PPP Unit in Mind

Formulation decisions shape relationships across the supply chain. A PPP-informed approach still begins with safety and efficacy, but it also considers the origin of each ingredient and the people and landscapes that produce it. This often means designing formulas that strengthen supplier networks—working with a hub of farms or processors and building continuity through the ingredients chosen. It may also mean thinking therapeutically at the level of ecoregions, where plants that grow well together in a landscape become part of a shared formulation strategy.

In practice, this requires longer timelines and closer collaboration. New ingredients may need 18–24 months for growing, harvesting, processing, and testing. Starting early with specifications and testing methods helps reduce complexity later. Technical support can also make a difference—site visits, equipment investment, and consultation with local teams. At the same time, data sharing becomes part of the relationship. Social, environmental, and market information can help everyone adapt, but requests for data should be respectful, transparent, and useful to the people providing it. And internally, this work only succeeds when teams across R&D, quality, marketing, sales, and sourcing understand and support the approach.

How to Apply

This work begins by mapping the PPP unit and documenting ecological, economic, social, and cultural assets. This could be done using a tool like the Community Capitals Framework (see this [SHI case study](#) where we applied this framework to Doselva's work in Nicaragua).

- Collaborate with partners by drafting MOUs that outline agreements around harvest timelines, pricing, use of stories, and other mutual benefits.
- Resource the loop through pre-financing, funding seed banks, creating youth apprenticeships, or other mutually agreed upon investments.
- Identify, based on shared values and competence in sustainable production, who are key supply partners and work to increase volume and ingredient diversity with them. This can mean flexing formulation to emphasize ingredients this supplier has in stock, but which a brand/buyer is not yet purchasing.
- Embed reciprocity into the company's Key Performance Indicators — i.e. see how key supplier volume increases, biodiversity indices change, wages improve, and women's leadership grows.



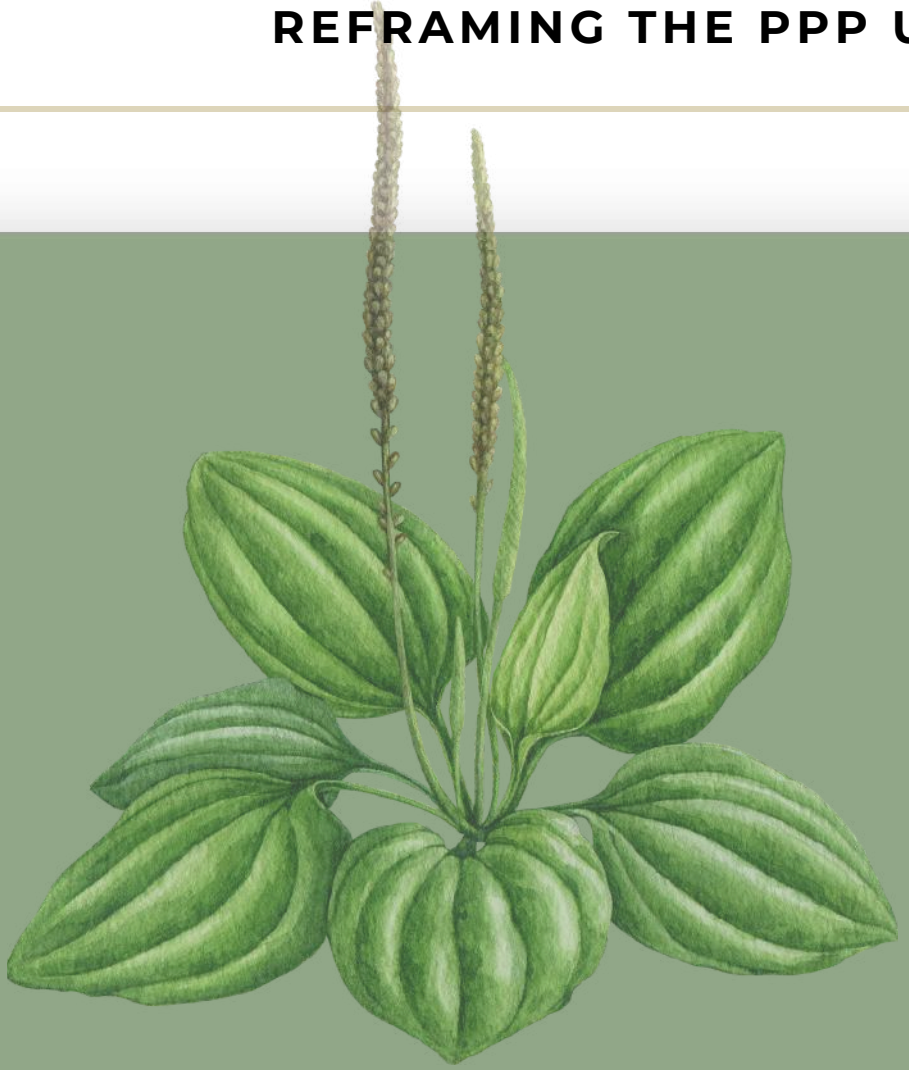
**“Not a mere link in the chain.
A living socio-ecological organism.”**

Gemini (Google-AI) generated image used to explain the concept (2026)

Pick a Plant

"Pick a plant."

JOSEF BRINCKMANN, WHEN ASKED BY HERB BUYERS WHAT THEY SHOULD DO



When asked by herb buyers what they should do, Josef Brinckmann said he tells them, "Pick a plant." Start with one herb that matters most to your company — maybe it's high volume, high risk, or central to your brand. Learn everything about it: where it grows, who collects or cultivates it, what pressures it faces, and why it matters. Make someone in your company the subject-matter expert who can answer those questions.

Then, go to the source. Visit the fields, meet the harvesters, see the conditions firsthand. Once you're there, you'll see what needs support — whether it's pre-financing, organic transition, or community investment. Act on it, even at a small scale. And then tell the story, honestly, so others in your company and in the industry can learn from it.

Starting with one herb shifts the frame. Ask one question: "What keeps this PPP unit well?" Write down the answers. Those words become the first set of KPIs for the unit. From there, small actions can be taken to support them.

By beginning here, we make a subtle shift: letting the PPP unit lead the market, rather than always only bending it to fit market demands. **This is the leadership shift that Guido Masé calls for — trade shaped by the living health of people, plants, and place.**

Strategic Formulation

- **Formulate to safety and efficacy:** traditional approach, but informed by plants / people / place: origin paradigm, consumer therapeutic journey to tonic herbalism
- **Formulate to support commitment:**
 - Hub / farm catalog, building ties through formula ingredients*
 - Therapeutic paradigm / ecoregion formulation*
- **Distribute risk in a new way:**
 - Especially for new ingredients, multiple products / delivery formats*
 - Accessible formulations, clear highlight of important ingredients*
- **Respectful timelines:** multi-year growing and processing cycles
 - Especially for new ingredients, 18-24 months. Start early.*
 - Specifications: minimize complexity, start early with testing methods for important ingredients*
 - Technical support: site visits, equipment investment, personnel consulting*
- **Building / sharing data:** social, environmental, market monitoring tools
 - Respectful and supportive data requests and transparency*
 - Internal (products company) information and buy-in: R&D, Quality, Marketing, Sales Strategic Sourcing*



This summary doesn't nearly do justice to the depth and nuance of Guido's presentation. SHI members can watch the full presentation.



CHAPTER FIVE

Importance of Supplier Visits

Supplier visits exist to strengthen relationships and improve decision making. Ideally their purpose should not simply be for inspection, certification, or content creation but to better understand the ground reality in order to facilitate responsible trading.

A good visit helps buyers and suppliers see the full context behind quality and price, bring up constraints that don't appear in contracts or audits, align expectations before problems show up in the market, and build a shared sense of responsibility for outcomes.

At their best, visits move trade from transactional to relational.



Matt Richards, Organic Herb Trading, and Ellie Thorne, Blue Sky Botanics, visiting suppliers.
Slide from Matt and Ellie's presentation on Partnerships and Relationships at the SHI Primary Processing Learning Lab (2026)

What success looks like

A supplier visit has been successful when:

- **Both sides leave with a clearer picture of each other's realities.** This includes technical constraints, financial pressures, seasonal limits, and regulatory demands.
- **At least one concrete change follows the visit.** This could be a spec adjustment, a pricing conversation, shared testing costs, different timing, or new support.
- **Trust increases between the partners.** Suppliers feel safer naming problems early. Buyers feel more confident in long-term commitments.
- **Knowledge is carried forward inside the buying company.** What was learned does not disappear when staff change.
- **The supplier would willingly host another visit.** This is often the clearest signal that the visit created value rather than burden.

Supplier Visits

The herb industry runs on relationships. But most relationships are "paper relationships." Herbs move through remote landscapes and change many hands. The people doing the harvesting, drying, and early processing often stay invisible to the buyer. Certifications, audits, and lab results matter. But they can't show the full reality on the ground.

When a buyer visits a supplier it signals genuine commitment. An SHI member noted that when a company is willing to spend money and allocate time to visit suppliers, it demonstrates a level of commitment. This is particularly important when proposing an innovation or new product project with the supplier.

Why Visits Matter

1. They build trust that paperwork can't

Trust grows when both sides share context. An SHI member described why transparency matters: "We have nothing to hide... we are very transparent with origin and names." A buyer visit can send the same message: we're here to understand and not here to extract.

2. They make hidden costs visible

A visit shows the work behind quality and compliance: drying, cleaning, sorting, storage, paperwork, permits, transport constraints, and the time pressure that sits at the start of the chain. This makes it easier to understand why the price-per-kilo often fails to reflect reality (especially in wild harvest systems where permits and management plans can be major work). "We've found consistently that once buyers see what goes into producing clean, compliant material, the conversation about price shifts."

3. They prevent quality problems upstream

Many failures happen before the lab. Visits help buyers and suppliers align early on: drying time and humidity control measures available; cleaning and sorting for foreign matter removal; microbial risk points; and where testing is most useful and where it is wasted effort.

4. They support better resource stewardship and community protocols

In many origins, building relationships with harvesting communities takes time. One SHI member described meeting with traditional leadership and community councils before they began actually meeting with and training harvesters. A buyer who visits and follows local protocol signals respect.

5. They create the conditions for transparency and traceability

A broader definition of "quality" includes social and ecological conditions. Visits are a practical way to strengthen this broader understanding.

When Visits Do Harm

Supplier visits can also damage relationships. Common failure modes:

- Surprise inspections. They create fear and performance anxiety.
- New demands with no support. You add requirements but keep price and lead times unchanged.
- Disruption during peak season. A visit can pull people away from harvesting and processing when every hour matters.
- You "audit" what you already decided to buy, then leave.
- Photo extraction. You take images and stories without consent or benefit.

If a supplier says "not this season" treat that as valid. If they say "not at all," ask for an explanation.

Plan the visit with the supplier, not for the supplier

AGREE ON PURPOSE

A good visit has a shared purpose. Examples:

- Troubleshoot a recurring quality issue.
- Understand true costs and constraints.
- Review post-harvest handling together.
- Discuss longer-term forecasts and investment needs.
- Align on what "good" looks like for both sides.

AGREE ON TIMING

Ask what timing reduces burden. Wild harvest and small farms often have narrow windows. Even travel seasons matter (for example, access during rainy seasons).

PAY ATTENTION TO BURDEN AND COST

Hosting takes time, transport, staff attention, and sometimes special preparation. Treat this as real work.

Options:

- Offer to cover local travel costs for the supplier team who must accompany you.
- Keep the visit short to be respectful of their time.
- Avoid last-minute requests for meetings, documents, or demonstrations.

HOW TO SHOW UP

Arrive as a partner, not an inspector

Framing the visit as a learning conversation, not an assessment, can change what suppliers may feel safe sharing. Use language that invites joint problem-solving: *Instead of "Can you meet this standard?" ask, "What would help you meet it?" Instead of "Why is this expensive?" ask, "Which costs are you carrying that we don't see?"*

Practice two kinds of seeing

Zoom In | Eagle Eye: Critical control points that affect safety, identity, and specifications.

Step back | Owl Eye: Labor conditions, decision-making, stress points, and the health of the system. Both matter. Many visits lean too hard into compliance and miss the context that explains the compliance.



Discussion with buyer from Gaia Herbs, CEO of Doselva, and farmer in the Doselva farming network

Transparency Goes Both Ways

Suppliers often get requirements without understanding the "why." Transparency that goes both ways helps provide a broader understanding of the context for decisions and expectations. As a primary processor asked it bluntly: "Why are buyers not audited?" Processors are often asked to be open about costs, constraints, and problems – and they should be. It helps when buyers share what's driving a spec change, what pressure they're facing, or where their forecasting is uncertain. This provides a context for solving problems together.

SHARE:

- What you test for and why.
- What your regulators or customers require.
- Where you have flexibility (and where you don't).
- What you are willing to change if a constraint is real.

This balances the power dynamic and makes it easier to solve problems together.

Story, Photos, and Consent

If you want stories or images, treat them as a shared asset, not a byproduct of access.

- Ask for informed consent in plain language.
- Be clear where content will appear and for how long.
- Offer a right to review and to say no.
- Share value back (credit, payments where appropriate, supplier-led messaging, or support for their own materials).

If the best outcome of a visit is "we learned a lot but we won't publish anything," that's still a successful visit.

Tradeshow and Event Meetings

Not all relationship-building happens at origin. Tradeshows can be important opportunities for establishing and deepening these relationships. They are not a substitute for supplier visits but they serve a distinct purpose: maintaining relationship momentum, opening conversations about current business and potential future directions, and spotting opportunities that would not surface in email. The face-to-face time at a tradeshow can open to deeper conversation.



Buyer from Gaia Herbs visiting suppliers in Nicaragua - Building the relationship

What Must Happen After the Visit

Just as buyers visit processors, processors visit their suppliers. It is important to note that a visit creates responsibility. If you "see" the burden, the next step is action.

1. CLOSE THE LOOP

Within a short, agreed window: send a summary of what you heard (not just what you observed); confirm priorities together; agree who does what, by when.

2. CONVERT INSIGHTS INTO COMMERCIAL CHANGES

Common examples:

- Adjust specs that don't match end use (reduce wasted work).
- Share testing costs or shift testing earlier where it prevents failures.
- Change lead times to match seasonality and logistics.
- Consider partial pre-payment or different payment terms where cash flow is a real constraint.
- Revisit price when you now understand true costs (many processors said buyers only understand pricing after seeing the process).
- Communicate order cancellations as early as possible. These can harm processors and the farmers they work with. If an order is at risk, flag it immediately rather than waiting for certainty.
- For new product development, be prepared to share a price range or indicative commitment before asking suppliers to invest in a trial. Without some signal of commercial intent, suppliers cannot responsibly commit resources.

3. DOCUMENT LEARNING SO IT SURVIVES STAFF TURNOVER

Several processors noted that relationships require repetition, especially when purchasing staff change. Build an internal "supplier relationship file" that includes:

- What matters to the supplier.
- Seasonal constraints.
- Agreed non-negotiables (on both sides).
- What support has been effective.



Essential oil distillation, northwest Nepal

Building Relationships in Herbal Sourcing

How to build buyer relationships that work for both sides. Based on what we've seen succeed, this section outlines a process for building buyer relationships that are resilient, fair, and quality-driven. Try what fits your context.

Operating principles: Reciprocity, Transparency, Consistency, Dignity and Voice, Long View.

A maturity ladder *The supplier relationship 4.0*

Used to
diagnose where
a relationship is

Level 1: Transactional

- Spot buys
- Limited traceability
- Price first

Level 2: Aligned

- Basic forecast sharing
- Annual visit or audit
- On-time payments

Level 3: Partnered

- Multi-year MOUs
- Pre-financing inputs
- Joint QA planning
- Shared data

Level 4: Co-creative

- Co-investment (drying, storage, agronomy)
- Joint storytelling
- Living-income benchmarks
- Shared innovation roadmap

What success looks like

- Fewer stockouts and rejections; more consistent quality.
- Shorter problem-resolution times and fewer "surprises."
- Transparent pricing logic and shared risk in tough seasons.
- Measurable livelihood and ecosystem gains at origin.
- Multi-year collaboration replacing one-off POs.

Operating Principles

RECIPROCITY

Make sure value moves in both directions — pricing, knowledge, shared risk.

TRANSPARENCY

Share what you know about specs, costs, and constraints. Expect the same back.

CONSISTENCY

Reliable communication and on-time payments signal you're serious.

DIGNITY AND VOICE

Involve the people whose work makes this possible in decisions that affect them.

LONG VIEW

The relationship's value over time matters more than this season's price per kilo.

A Maturity Ladder

(Used to diagnose where a relationship is — The Supplier Relationship 4.0)

1

TRANSACTIONAL

Spot buys; limited traceability; price first.

2

ALIGNED

Basic forecast sharing; annual visit or audit; on-time payments.

3

PARTNERED

Multi-year MOUs; pre-financing inputs; joint QA planning; shared data.

4

CO-CREATIVE

Co-investment (drying, storage, agronomy); joint storytelling; living-income benchmarks; shared innovation roadmap.



SHI Members from Pure Synergy, Organic Herb Trading, and Yogi make tortillas with farmers from Doselva, Nicaragua. SHI Learning Journey.

Four High-Impact Ideas on Building to Level 4

1. Commit to Basic Forecast Sharing

This allows for necessary planning. Plan to give your supplier the forecast ahead of time and ensure they pass this information to the source. Even a 6–12 month forecast helps suppliers plan their crops, invest in labor, and build post-harvest capacity. They can secure seeds, inputs, and equipment in time rather than react to last-minute orders.

- Reduces the risk of costly over/underproduction.
- This will allow vendors to get investment. A forecast from a trusted buyer can be shown to local banks, cooperatives, or input suppliers to negotiate better terms.
- Improves quality consistency. When they know what's needed and when, they can plan harvests and processing to match your quality requirements instead of rushing.
- Reduces volatility and supports coordinated planning for processing capacity, logistics, and sustainability projects that require more than one season to implement (e.g. Scope 3 Emissions).

2. Commit to Consistent Payment Terms

- Predictable payment timing lets suppliers cover labor wages, input purchases, and operational expenses without resorting to high-interest loans. It stabilizes their cash-flow.
- Regular, on-time payments signal reliability, making the buyer a priority partner when supply is tight. Builds trust.
- Enables investment in quality — with steady cash flow, suppliers can put money into improved drying, sorting, or certification compliance instead of patching cash gaps.
- Reduces stress and uncertainty — farmers and processors can focus on growing and producing rather than chasing overdue payments.

3. Co-create Specifications

Unlike synthetic ingredients, herbal raw materials are not "generics." Every harvest is a result of the origin's unique ecology, agronomy, and environment. Even within the same species, chemical composition and physical characteristics can vary widely due to genetic diversity, environmental conditions, season variability, post-harvest handling and local infrastructure limits. Dryers, sorters, and milling equipment differ across regions. What's "achievable" in one origin may be impractical in another without major investment. Co-creating specs ensures that quality standards are scientifically grounded, context-aware, and achievable, which protects both the integrity of the plant and the sustainability of the supplier relationship.

4. Share Feedback and Meet Regularly

Transparency is the antidote to misunderstanding. Share information about quality expectations, pricing logic, market trends, and even challenges openly. Regular joint planning creates a feedback loop where information moves freely from the field to the buyer and back again: **Monthly operational calls** act as the short feedback loop: catching emerging issues (weather changes, pest outbreaks, logistics delays) before they escalate. **Annual After Action Reviews (AARs)** function as the long feedback loop: looking back at the entire season to identify patterns, root causes, and systemic improvements. This is likely to create a systematic effect where material is not rejected, both parties adapt mid-season, reducing waste and improving quality in real time. Regular touchpoints ensure the information flows in the system are open and healthy.

Case Study: Traditional Medicinals: Putting Best Practices into Action

To mark its 50th anniversary, Traditional Medicinals hosted a milestone event at Biofach 2025, bringing together its entire supply chain—from farmers and primary processors to sourcing partners—for a collaborative working session.

KEY OBJECTIVES OF THE SESSION INCLUDED:

- Business and performance update.
- Mid and long term forecast review.
- Openly discussing challenges such as crop variability and quality specifications.
- Aligning on a shared vision and multi-year plan.

THE IMPACT WAS FAR-REACHING:

INCREASED TRANSPARENCY

Participants gained a clearer understanding of each other's realities and constraints.

IMPROVED PLANNING

Joint reviews of forecasts and quality expectations will help reduce future disruptions in supply.

STRENGTHENED TRUST

The inclusive approach reinforced the message that suppliers are valued partners.

MEANINGFUL RECOGNITION

By inviting suppliers to Biofach (many for the first time) Traditional Medicinals honored their contributions with dignity and respect.



Image showing the brand, processor, and producer all meeting at Biofach

This initiative demonstrates Traditional Medicinals' commitment to long-term, ethical partnerships and its dedication to continuous improvement through collaboration and shared purpose.

Measure What Matters

Beyond price and volume, track:

- Supplier retention
- Farmer income stability
- Reduction in rejections
- Co-created product specification; shared storytelling
- Environmental or social impact improvements

Building and maintaining relationships in the herbal industry means thinking like a grower; cultivating soil (trust), tending regularly (communication), pruning when necessary (course correction), and celebrating the harvest (shared success). It is important to let the PPP (plant-people-place) unit lead the way, not the market or individual desires.

CHAPTER SEVEN

Sourcing Relationship Health Assessment

What makes a good buyer? What makes a good supplier? We created this assessment as a guide to offer insight into the quality of your relationships. The responses are to be used for internal reflection and self improvement only.

If your score is low, take time to reflect on what you as a buyer are doing to facilitate a trusting/open relationship and what you may be doing to undermine that relationship. How can you improve communication?

A GOOD BUYER TENDS TO:

- Share buying forecasts, lab test results, and requirement changes proactively
- Communicate problems and cancellations early.
- Connect buying price to reality, not just market benchmarks.
- Visit with curiosity and follow up with action.
- Treat supply chain members as relationship holders, not means to an end.

A GOOD SUPPLIER TENDS TO:

- Name constraints early, before they become failures.
- Invest in traceability and quality systems, and help buyers understand what those costs are.
- Share what good looks like from their side and push back when buyer requirements don't match reality.
- Make buyers feel welcome to visit, and use visits to show the complete picture transparently.

Buyer » Supplier (Internal reflection tool).

For each question, select a score from 1 (low) to 5 (high). Answer based on what you experience most of the time.

1. Supplier openness about challenges

Does the supplier raise challenges on their own, or mostly in response to your questions?

Score	Description
1	Only shares issues when pressed
2	Shares late, after problems escalate
3	Shares sometimes, but not consistently
4	Usually raises issues early
5	Proactively flags risks and constraints without prompting

2. Usefulness of information shared

When the supplier shares information, how useful is it for your decision making?

Score	Description
1	Information is vague or too late to act on
2	Some detail, but limited decision value
3	Generally useful, but gaps remain
4	Clear, timely, and supports planning
5	Consistently actionable and anticipates downstream needs



SHI discussion between brands and suppliers in Nicaragua

PART II — REFLECTION: What's working and what's not?

5a. Overall, are you satisfied with the quality of the botanical materials you source?

☐ Yes ☐ No

5b. If not, what would you like to change? (Check all that apply and explain.)

AREA

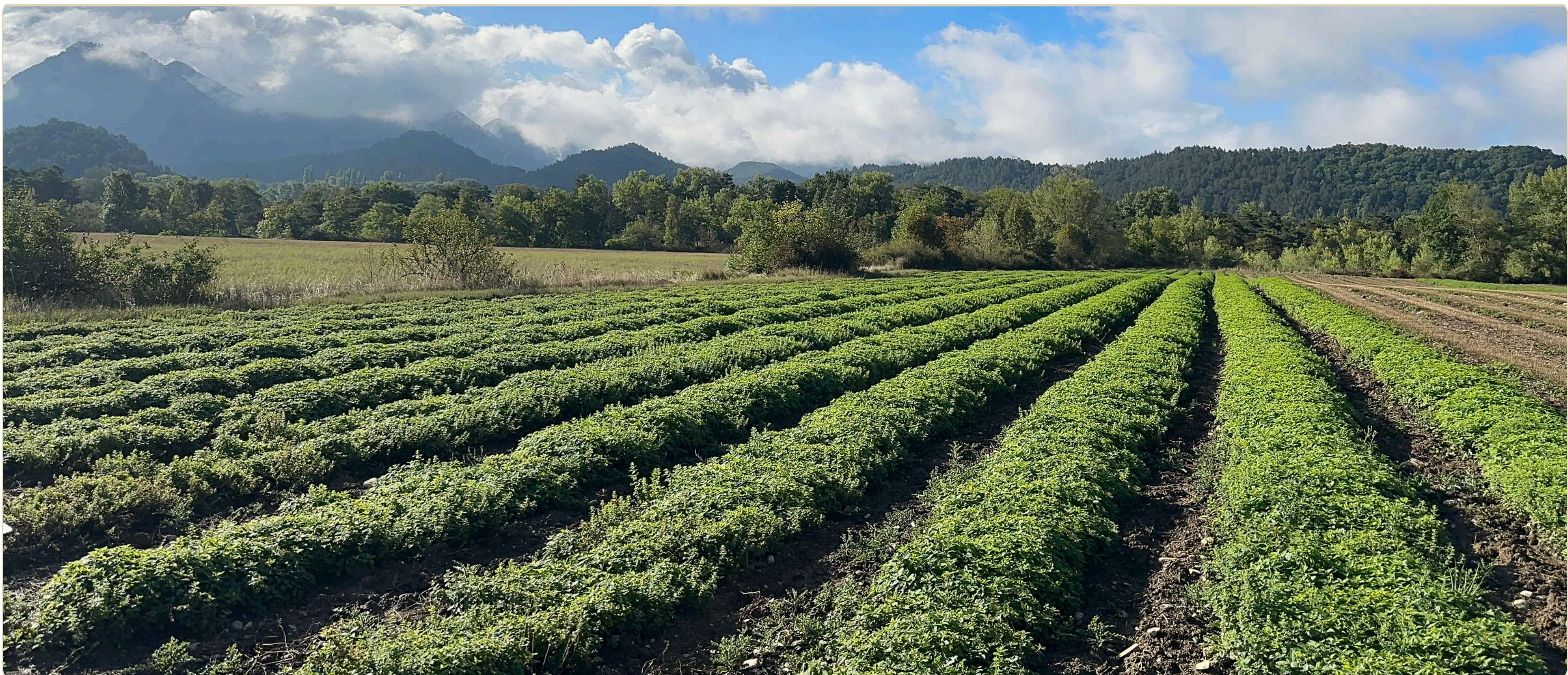
☐ Quality

☐ Price

☐ Quality (testing etc.)

☐ Relationships (vendor/manufacturer is not listening, meeting your needs, etc.)

☐ Sustainability (i.e. product is not organic or fair certified, distance is too far, too much energy required to process the botanical, diminishing supply due to climate change, at-risk plants, etc.)



Lemon balm fields, l’Herbier du Diois, France

3. Proactivity in updates

How proactive is the supplier in sharing updates on crops, formulations, processing, or risks?

Score	Description
1	You have to chase for updates
2	Updates arrive late or incomplete
3	Basic updates, not always timely
4	Timely updates with useful detail
5	Clear, forward-looking updates that support planning

4. Clarity around trade-offs

When constraints arise, how clearly are trade-offs discussed (price, timing, quality, volume)?

Score	Description
1	Trade-offs are hidden or emerge only after failure
2	Trade-offs are mentioned but not explored
3	Some discussion, but decisions feel one-sided
4	Trade-offs are clearly explained and discussed
5	Trade-offs are openly named and worked through together

5. Transparency around costs and constraints

How open is the supplier about cost drivers and operational limits?

Score	Description
1	Cost and constraints are opaque or avoided
2	Minimal disclosure, often defensive
3	Partial transparency when asked
4	Open discussion of key cost and constraint areas
5	Clear, proactive sharing of cost pressures and limits

What to do next:

Remember to use this tool for self reflection and self improvement only.

If your score is low, take time to reflect on what you as a buyer are doing to facilitate a trusting/open relationship and what you may be doing to undermine that relationship. How can you improve communication?

6. Ease of communication

How does the relationship feel on a spectrum from interrogation to coffee with a friend?

Score	Description
1	Tense, guarded, or transactional
2	Polite but cautious
3	Neutral and functional
4	Open and comfortable
5	Candid, trusting, and human

7. Reliability and follow-through

How often does the supplier keep their word? And how do they respond when they can't?

Score	Description
1	Commitments often missed, little explanation
2	Missed commitments with weak communication
3	Usually delivers, but struggles to explain failures
4	Keeps commitments or communicates early when issues arise
5	Highly reliable, transparent, and accountable

Scoring

Add up the seven scores. Total possible: 35

7–14	Fragile relationship High risk. Low trust. Likely extractive or misaligned.
15–22	Functional but strained Works day-to-day, but breaks down under pressure.
23–29	Stable and collaborative Solid working relationship with room to deepen trust and planning.
30–35	Strong and resilient Relationship supports long-term quality, supply security, and shared problem-solving.

CHAPTER EIGHT

Mapping Sourcing Risk

Primary processors operate at a critical point in the botanical supply network. Processors connect farms and collectors with the traders, distributors and brands.

Risk mapping is ultimately about people and places, not just data and lots. The goal is to shift from extractive relationships to ones that honour the plant-people-place nexus.

Some Unknown Risks

1. The vendors that we have built relationships with, supported through advance payments, provided primary processing equipment can lose their organic or Fair certifications.
2. The vendors who have committed to supply us material resort to side selling to other buyers
3. The certification body that audit us or our vendors can lose their status and power to certify.
4. During organic certification audits, each of our vendors are unable to provide organic material with a transaction certificate for 2 months out of a year

List of unknown risks faced by an Indian Primary Processor ([Herb Artizan](#))

Purpose

Mapping sourcing risk allows you to better understand where your supply chain may be vulnerable. Proactively identifying those vulnerabilities can help you avoid quality failures, supply disruptions, or loss of buyer trust. Risk mapping helps primary processors move from reactive problem-solving to proactive supply chain management. Instead of responding to issues lot by lot, you can better understand patterns across ingredients, regions, suppliers, and market conditions.

In practice, sourcing risk mapping helps us:

- Identify ingredients and regions that require closer oversight
- Detect early warning signals for fraud, contamination, or supply instability
- Align testing, verification, and supplier engagement with actual risk levels
- Strengthen transparency and traceability for buyers
- Guide strategic investments in supplier relationships and infrastructure

Herbal supply is variable by nature. But documenting, tracking, and asking the right questions reduces surprises.

What Success Looks Like

Successful sourcing risk mapping does not require complex software or perfect data. It requires a clear, structured understanding of your supply chain and its vulnerabilities, paired with consistent action. Success means fewer surprises, stronger partnerships, and greater confidence across the supply chain.

When risk mapping is working well, a primary processor can:

- Understand their supply ecosystem clearly — know the origin, supply structure, and key suppliers for major herbs.
- Recognize when the plant material changes hands and what systems/operations each has in place to maintain quality.
- Maintain visibility as far upstream as reasonably possible. Ideally, we would like to know what farm/farms the plant material has come from.
- Identify higher-risk ingredients and regions. A complete risk assessment would include: quality and active constituents; climate risk (flooding, drought, yield instability); geopolitical risk; human rights and labour risk; regulatory risk; environmental and contamination risk; and adulteration risk.
- Align controls with actual risk — increase testing and verification where risk is higher and focus resources where they make the biggest difference.
- Support improvements in post-harvest handling, drying, and storage at the source.
- Communicate transparently with buyers — clearly explain sourcing structure and traceability, share early warnings about supply changes or emerging risk, and provide consistent documentation and supplier information.

The SHI Mapping Sourcing Risk group has been asking: how can we collaborate to create more resilience in communities and build supply ecosystems that are fair, transparent, and regenerative?

Key Risk Dimensions

Effective risk mapping requires looking across multiple dimensions simultaneously.

QUALITY AND IDENTITY RISK

Adulteration:

- Substitution of species, blending with inferior material, artificial enhancement (e.g., lead chromate in turmeric powder)

Contamination:

- Heavy metals (especially lead in root crops), pesticide residues, mycotoxins from improper drying or water exposure, microbiological contamination

Species misidentification:

- Especially relevant where multiple varieties of a species are traded and have different quality profiles

Post-harvesting handling failures:

- Inadequate drying, improper storage, and foreign matter from poor cleaning processes

Testing is a key tool but has limits. Lab results at point of receipt cannot tell you when or how contamination occurred that requires supply chain visibility and supplier relationships.

CLIMATE AND ENVIRONMENTAL RISK

Yield instability:

- Drought, flooding, unseasonal rainfall

Crop disease:

- Leaf diseases that spread to roots; pest pressure that organic farmers struggle to manage without synthetic inputs

Upstream and non-point contamination:

- What is happening on neighbouring farms or in water sources?

Biodiversity risk:

- Where is over-harvesting threatening wild-harvested species?

Scope 3 emissions:

- What is the carbon footprint of your ingredient supply chain?

MARKET AND FINANCIAL RISK

Price volatility:

- Herbs like turmeric have seen prices double in short periods

Middlemen dominance:

- When farmers do not understand pricing mechanisms or timing, they are vulnerable to exploitation

Order cancellation:

- Late cancellations hurt farmers and processors who have committed resources. Share cancellations as early as possible.

Over-dependence on a single buyer:

- Suppliers with one or two major customers are extremely vulnerable

SOCIAL AND ETHICAL RISK

Living wages:

- Can farmers and harvesters meet their basic needs from what they earn supplying your products?

Child labour:

- Where in the supply network is this a risk?

Gender equity:

- Are women in harvesting and processing communities receiving fair wages and working safely?

Labour sourcing:

- When farmers hire workers from other regions or states, what protections and equity are in place?

Price instability:

- When prices are highly volatile, farmers cannot plan. This drives either quality shortcuts or exit from the market altogether.

REGULATORY AND CERTIFICATION RISK

- Fraud in organic certification
- Certification gaps for small farmers in cooperatives
- Import requirements: different markets have different testing requirements
- Geopolitical risk: sourcing from regions with political instability

Streamlining Supplier Qualification

A consistent challenge raised across meetings is the burden that multiple, redundant qualification questionnaires place on suppliers, especially small farms and processors. A member shared that they fill out 60 supplier qualification forms per year for buyers, with near-complete redundancy. This burden falls heaviest on the smallest and most relationship-oriented suppliers.

OPPORTUNITIES FOR IMPROVEMENT:

- Work toward a shared baseline questionnaire covering food safety fundamentals that suppliers can complete once and share with multiple buyers.
- Reserve company-specific questions for the genuinely unique requirements of your operation.
- Consider accepting a supplier's own sustainability report or documentation (where rigorous) rather than requiring them to translate it into your format.
- Invest in platforms (such as Tracegains) that allow supplier data to be entered once and accessed by multiple buyers, reducing duplication.

Collaborative Risk Mapping

One of the central insights from the working group is that risk mapping does not have to be done alone. Many of the challenges facing herbal supply chain, climate risk, adulteration, smallholder vulnerability, regulatory change, are shared across companies. Collaboration on risk intelligence, even between competitors, is possible where companies focus on pre-competitive knowledge rather than supplier-specific information.

WHAT CAN BE SHARED

- Risk frameworks, scoring tools, and templates
- Regional risk profiles (known contamination risks, climate exposures, market dynamics)
- Research on specific species: cultivation challenges, quality drivers, adulteration methods, testing approaches
- Best practices for post-harvest handling, drying, and storage by crop type
- Case studies of quality failures and how they were resolved framed around learning
- Open-access databases of biodiversity, climate, and sustainability data relevant to sourcing regions

WHAT IS TYPICALLY NOT SHARED

- Specific supplier identities and relationships — these represent years of investment and are legitimately proprietary
- Pricing arrangements and commercial terms
- Volumes and ingredient lists that would reveal formulation strategy

The group has found that focusing on practices, processes, and shared challenges rather than specific supply networks creates the most durable space for pre-competitive collaboration.

From Risk to Action

Risk mapping is only valuable if it leads to change. The group identified a four-part framework for turning risk intelligence into action:

VISION

What does a fair, transparent, regenerative supply network look like for your organisation? Without a clear picture of where you are trying to go, risk management becomes purely defensive.

KNOWLEDGE

Know your herbs. Know the regions. Know the people and communities doing the work. Build internal awareness so that staff at all levels understand where ingredients come from and what current risks are.

TOOLS AND ASSESSMENT

Use a risk scoring framework; a supplier tiering system; a supply network map showing where material comes from and where visibility gaps exist; and a shared, open-access database of regional and species-level risk data where possible.

ACTION

Adjust testing and verification protocols based on risk level. Prioritise supplier visits where risk is highest. Share findings constructively. Adjust purchasing practices. Invest in supplier capability. Contribute to collective efforts.



3D Mapping of the herbal products industry, SHI members, Nicaragua Learning Journey

CHAPTER NINE

Certifications in the Herbal Supply Chain

Certification has become a central tool in the herbal sector. Done well, certifications open markets, strengthen internal systems, build capacity, and give buyers a basis for trust. Done poorly, or pursued without a clear purpose, they can be expensive, unpredictable, and hard to justify when the promised premium never arrives.

The most useful place to start is not with the question of which certification to pursue, but with a prior question: what do you actually want to protect?

In 2026, the SHI is organizing a members-only series of discussions on the value, challenges and opportunities of certifications. This overview is meant to identify key issues at this time.



The array of certifications a primary processor needs to choose from
This list is not comprehensive

Questions Worth Asking Before Pursuing a Certification

- What market are you actually trying to reach, and is certification the required path to get there?
- What are the underlying issues you care about, and is certification the most effective tool for addressing them?
- Does this fit your company's values and operating reality, or are you chasing a standard in hopes customers will follow?
- What would you do with these funds if you invested them differently?

Real Benefits

Primary processors with whom we spoke all agree that certifications have pushed their companies to strengthen internal systems. Specific tools that emerged from certification requirements and proved valuable in their own right:

- **Odoo ERP**, used to track true costs per kilo and create transparent pricing records
- **QR-coded batch traceability**, linking each product back to its source with photos and timestamps
- **KoboToolbox**, a flexible field data platform used to log technician activities, collect farmer surveys, and document harvest conditions

These systems, though initially built to satisfy auditors, gave companies greater control, transparency, and the ability to make a more credible case to buyers. The discipline mattered even when the certification premium did not materialize.

KOBOTOOLBOX: A FIELD TOOL WORTH KNOWING

KoboToolbox is a free data collection platform built for field use. Forms are built on a computer, deployed to a phone or tablet, and data syncs when you are back online. Available at kf.kobotoolbox.org.

Useful for:

- Farmer and harvester surveys: livelihood data, practices, community feedback
- Technician field logs: daily tasks, materials handled, areas visited
- Harvest and collection records: date, location, quantity, collector name
- GPS mapping: pinning wild harvest zones and collection points
- Photo documentation: conditions at point of collection or intake
- Quality control checklists: intake inspections, sorting, drying conditions
- Certification audit trails: timestamped records exportable for auditors



Preparing for the FairWild audit, Nature Connect, India

Market Access Without Premiums?

For most processors, the primary reason to certify is market access. Without recognized certifications, many international buyers will not consider a supplier at all. The premium, where it exists, is secondary.

"Without certification we won't be able to sell in many markets."

SHI MEMBER • PRIMARY PROCESSOR

Despite the promise of new markets, many primary processors said that there often isn't enough demand for certified materials and that what they are able to sell doesn't justify the investments made to become certified and to maintain the certifications.

"You must be 100% sure there's a buyer asking for it, otherwise, it's a wasted investment."

SHI MEMBER • PRIMARY PROCESSOR

Clash With Community Realities

Certification frameworks often miss or simplify the lived realities of harvesters and smallholders. Two examples from our conversations:

First, fair trade premium rules typically restrict funds to collective projects, prohibiting their use for individual or immediate needs. In practice, this means harvesters are told the premium is their money while being prevented from using it for medical bills, school fees, or food emergencies. The intention behind the rule is understandable, but the gap between the promise and the reality damages trust.

Second, standards like Global G.A.P. require infrastructure, including latrines, signage, and storage facilities, that is simply out of reach for smallholders beginning to move from subsistence to market production. To certify these farmers at all, the primary processing company often has to cover the infrastructure costs itself. This creates pressure to shift attention toward better-resourced farmers who can comply more easily, leaving the most vulnerable producers behind.

A related issue is auditors. Most come from outside the local context, do not speak the languages of the farmers or harvesters they are auditing, and rely on translators provided by the company being audited. The costs of flying in and hosting international auditors fall to the processor. These are significant and often underestimated expenses.



Training for the Wild Stewards Alliance,a point-of-harvest initiative in Appalachia

What This Means in Practice

Taken together, these experiences point to a consistent conclusion: certifications are often necessary for market access, but they are not sufficient for building resilient supply chains. Their greatest value lies in the internal systems and discipline they require you to build. Their greatest risks lie in the hidden costs, the gap between promised and actual premiums, and the potential to exclude the communities they are meant to support.

"We're spending about 10% of our total budget on certifications, and that amount is growing."

SHI MEMBER • PRIMARY PROCESSOR

THE PRACTICAL GUIDANCE WE HEARD MOST CONSISTENTLY:

Do not certify without confirmed buyer commitment. Market access is the goal, not certification itself. If no buyer has committed to purchasing certified material at a price that covers your costs, the investment cannot be justified.

Budget for the full cost. Annual fees are only the beginning. Factor in audit and auditor travel costs, staff time for documentation, infrastructure investment, and the cost of systems that need to be built or upgraded.

Build strong internal systems regardless of certification requirements. Traceability, field data collection, and quality documentation are valuable in themselves. Do not let their value depend on whether the certification they support delivers a premium.

Do not maintain certifications that buyers are not actually buying. Holding a certification that generates no committed purchasing at a fair price is a cost without a return.

Relationships and transparency matter as much as credentials. Every processor we spoke with said the same thing: lasting sustainability depends on trust with producers and buyers, not on the certificates on the wall.



FairWild certified wild harvester, Runo, Poland

CHAPTER TEN

True Costs & Fair Pricing

This guide helps processors name the costs of moving herbs from communities to market. The goal is to make pricing transparent and fair so producers can stay in business, harvesters are paid on time, and buyers understand what it takes to support the whole system.

"If the price is lower than this, you need to ask what corners were cut."

SHI MEMBER



Seeing Double: The Hidden Costs in Herb Supply Chains

In a Monthly Meeting Oct 2025 SHI members shared insights into the buckets of costs their company has and the risks associated with those costs.

What Success Looks Like

- Buyers know the steps and costs behind each kilo and look at the sources for raw material from a more holistic perspective.
- Floor prices are defined and respected. No one is asked to sell below viability.
- Risk is shared through advance payments, testing cost-sharing, and longer-term commitments.
- Collectors and farmers see consistent, timely pay.
- Less "race to the bottom" pricing, more stability across the system.
- Producers and processors reinvest in soil health and land management, equipment, training, and communities instead of cutting corners.

What Counts as a True Cost?

Producers and processors remind us that costs include investing in soil health, drying and redrying, sacks and pallets, transport from remote forests, fuel and electricity, testing, permits, certifications, and often small but steady requests from communities like a fence, a meeting hall, a new sack of seed. These relationship costs stabilize supply but are invisible in market spreadsheets.

When we reduce costs to a single number, much is lost: the hours building trust with collectors, the risks carried when buyers delay payment for 90 days, the investment in processing equipment that buyers expect but rarely help fund.

Finding the Floor Price

To stay viable, processors calculate a floor price:

- All costs (labor, drying, transport, testing, certification, overhead)
- Plus a margin to reinvest in equipment and people
- Plus a buffer for cash-flow gaps and currency swings

Anything less means someone — processor, farmer, or harvester — is being squeezed. One SHI member put it plainly: "If the price is lower than this, you need to ask what corners were cut."

How We Can Share the Story With Our Buyers?

Numbers help, but stories make the reality tangible. As an idea, SHI Primary Processing WG members created one-page "cost logic" sheets that included:

- A simple map of steps from field to drying to testing to export.
- A pie chart of cost percentages.
- Clear risks (rainy-season humidity, pesticide drift) and how they are managed.

Others bring buyers to the farm or film short videos. Seeing the drying sheds, or the weight of a fresh bag carried from the forest, shifts the conversation.

Botanical Cost of Quality: An Economic Framework for Botanical Price Floors and Adulteration Prevention is a review paper now under peer review by Blake Ebersole and Trish Flaster. Follow that initiative [here](#).

Learning From Each Other

In our SHI Primary Processor working group, processors are learning from each other. We are discussing how to reduce costs without pushing risk downstream. Some examples include:

- Drying and sorting closer to the harvest site lowers transport weight and prevents rework.
- Training collectors on quality reduces dirt and foreign material, saving on cleaning and lab rejections.
- Aligning processing to end use prevents unnecessary steps — not over-cutting tea herbs destined for tincture, for example.
- Sharing lab tests across buyers or co-funding micro tests lightens the burden.

If you don't know your costs, you can't know if the price you're offered is fair. Many processors end up selling at a loss without realizing it, because prices are set by "the market" and not by the work it takes to get herbs ready for sale. Cost analysis is a way to make those hidden costs visible — to yourself, and to your buyers.

Step 1: Map the Work You Do

Start by listing out every step that happens before an herb leaves your facility. Think of it as a chain of activities:

- Harvesting and collecting
- Preparing the soil, planting, weeding, harvesting
- Pre-cleaning and washing
- Drying (sun, shade, or mechanical)
- Sorting and cutting

- Transport and storage
- Microbe reduction / Sterilization (if needed)
- Packaging and labelling
- Quality testing and certification

This is your map. Each of these steps has costs.

Step 2: Write Down the Costs for Each Step

For every step, ask: what do we spend here? This list is to get you started; it is not exhaustive.

- **Labor:** how many hours and at what pay rate?
- Energy: firewood, electricity, diesel
- Materials: seeds, soil amendments, bags, boxes, labels
- Transport: fuel, truck hire, permits
- Overheads: salaries of staff, office costs, depreciation of machines
- Certification/testing: fees, lab tests, inspections

Even if you can't get exact numbers at first, make estimates. You'll refine them as you go.



Step 3: Choose a Way to Organize It

Activity-based costing: Track costs for each activity (drying, transport, etc.) so you can see which steps cost the most.

Standard + actual: Make a "standard cost" per kilo (e.g., drying normally takes 10 hours) and then record what it actually took this season. The difference tells you why one batch cost more.

Contribution margin: Subtract your variable costs (the things that change with each batch, like bags or energy) from the sales price. What's left must cover your fixed costs (like salaries and machines). If it doesn't, you're under water.

True-cost accounting: Add in social and environmental costs, like paying living wages or replanting. This makes your case stronger when talking to buyers who care about sustainability.

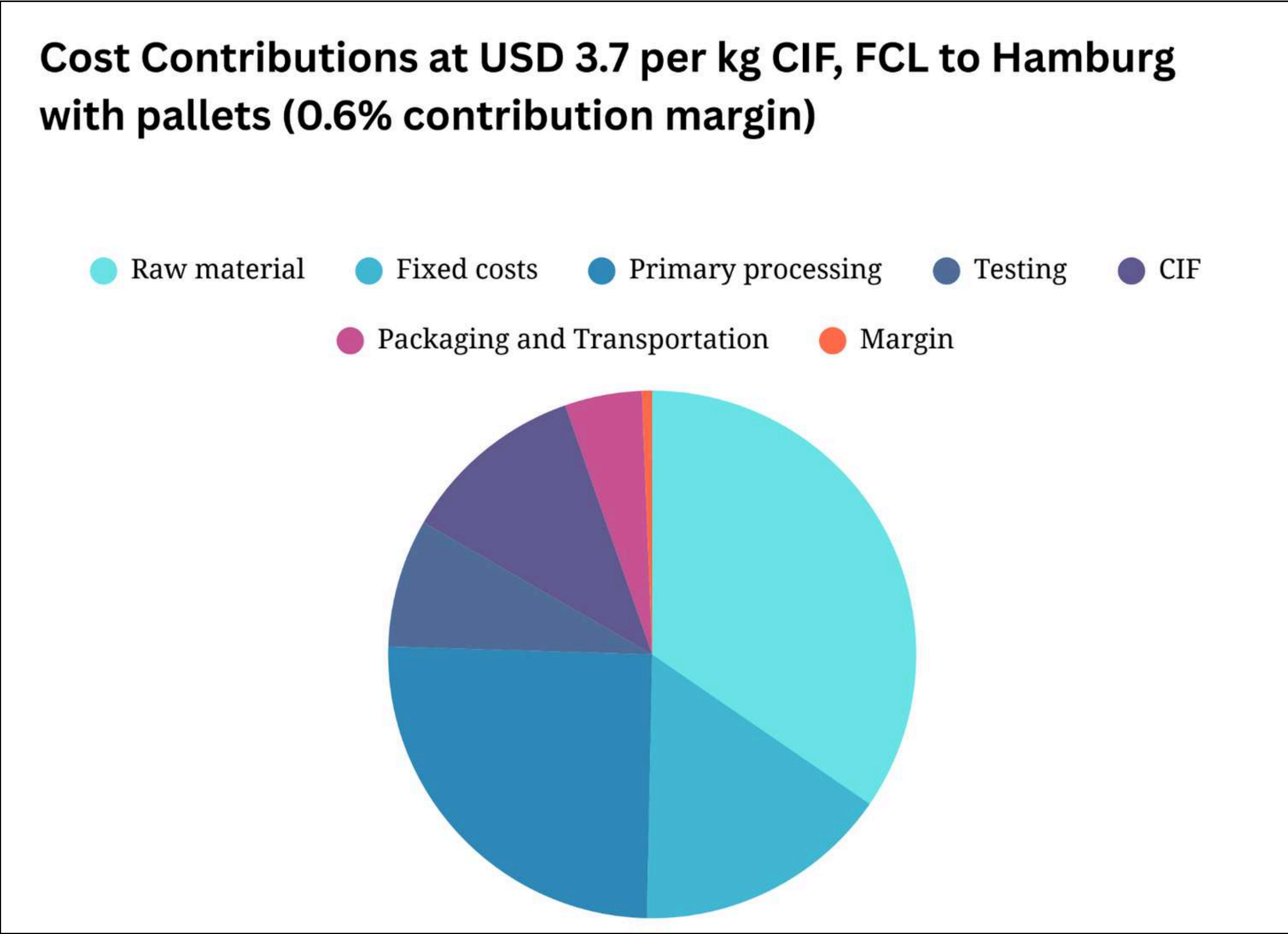
Step 4: Reinvest in the Unit

The point of margin is not just profit. It's what allows you to keep the unit healthy: machines (replacing or repairing dryers, sterilizers, or grinders); salaries (fair pay and benefits for your staff so they stay with you); compliance (certification renewals, lab equipment, audits); community/environment (forest management, soil labs, apprenticeships).

Step 5: Show it Clearly

Buyers don’t want to read spreadsheets. Turn your numbers into simple visuals. For example, a pie chart showing:

- 30% harvesting and collection
- 25% drying and processing
- 15% testing and certification
- 20% logistics and transport
- 10% overhead



A real example of what Nikita Agarwal ([Herb Artizan](#)) shared with a distributor pushing on price, after this the buyer stopped pushing.

Gates of Quality: A Multi-Stakeholder Perspective

This document emerged from discussions among members of the SHI Quality and Sustainability Working Group. It maps out what it actually takes to produce herbs that meet regulatory quality standards, breaking down the responsibilities and challenges at each level of the supply ecosystem to create greater understanding among the different stakeholders.

Quality testing catches adulteration and contamination at the end of the chain, but it cannot tell you about what happened upstream. A CoA is not a relationship.



Quality assurance during primary processing | photo by Pebani

Introduction

Quality in the herbal products industry is not a problem that any single actor can solve alone. A wild harvester working in difficult conditions cannot implement new handling practices without compensation and training. A processor cannot absorb the cost of rigorous testing without buyers who value and pay for that rigor. A brand cannot justify paying more for quality material when the market rewards the cheapest product on the shelf.

This document seeks to show that quality is only as strong as the relationships and economic realities at each link. Quality testing catches adulteration and contamination at the end of the chain — but it cannot tell you about what happened upstream. A CoA is not a relationship.

The goal of the SHI Quality and Sustainability Working Group is to build the shared understanding that makes better relationships possible: clearer specifications, more honest conversations about cost, and a collective commitment to ensuring that the people and ecosystems at the beginning of the chain are not the ones who bear the greatest burden. Our hope is that having more open conversations about the challenges at each step can lead to fewer rejections and help eliminate expensive remediation. Ultimately we hope these changes allow companies to pay more for quality material.

This document is a high-level summary of the quality risks at each step to enhance communication. AHPA provides detailed and thorough guidelines on implementing Good Agricultural and Collection Practices. In addition, Good Agricultural and Collection Practices (GACP) for Medicinal Plants is an illustrated booklet outlining these practices for producers. See these guides for insight into the best practices to follow and for ways of assessing suppliers. See SHI's Quality Control section for more information on types of lab testing.

Note: Climate disruptions are increasingly impacting quality. While this document does not touch on these impacts, the SHI Quality and Sustainability Working Group is exploring them elsewhere.

The Fundamental Challenge

Quality herb production requires investment at every level of the supply network, yet these costs are often not shared equitably among stakeholders. The current system often expects the cheapest products with the highest certifications — a mathematically impossible combination that puts the entire supply chain at risk.

The solution requires industry-wide recognition that quality costs money, and that those costs need to be shared appropriately rather than absorbed by suppliers who have the least capacity to bear them.

Compensation Cascade



The SHI website provides an overview of the different steps and stakeholders in a plant’s journey from seed to shelf [here](#).

Key Quality Principles at All Steps

All three of these levels will be subject to FDA inspections which may have different types of inspections. Key quality practices to be followed at all steps include:

- Correct identification
- Cleanliness
- Adherence to regulations at all points of commerce (growing region, producing region, sales region) and accurate completion of the corresponding required documentation
- Meet appropriate specifications

STAGE ONE

The Plant and the Ecosystem

Before tracing the herb's journey through the supply chain, it's worth pausing at the beginning with the plant itself, growing in a field or forest. Quality is shaped long before a harvester arrives. The questions asked here set the foundation for everything that follows.

THE CONVENTIONAL QUALITY QUESTIONS

- Is it the right species? Correctly identified?
- Is it wildcrafted or cultivated?
- Is it organic, pesticide-free?
- Was it harvested at the right time for maximum constituents?

THE DEEPER QUESTIONS

- What is the population status of this plant? Is harvesting at current levels sustainable for the ecosystem?
- Is it on a watch list — CITES, IUCN Red List, and equivalents in other geographies.
- What is the soil health and biodiversity of where it was grown? Organic certification tells you about pesticides, not about soil life.
- What would quality sourcing look like from the ecosystem's perspective?



Goldenseal
Hydrastis canadensis
©Steven Foster

STAGE TWO

Producers

Producers include wild harvesters and farmers. The main quality principles of Good Agricultural Practices are:

PREVENTION OF CONTAMINATION

From soil or irrigation water, dirty containers, drift from other locations, etc.

BEST ACTIVE INGREDIENTS

The location of the cultivation site (soil and weather influences), the variety of the species used, the irrigation cycles, the harvest time are some of the factors that may influence the potency of the active ingredients.

DOCUMENTATION & TRACEABILITY

If it is traceable then it becomes much easier to identify and therefore address any quality related issues that may arise at a later date. Good record keeping is a major focus of GACP guidelines.

a. Wild Harvesters

THE CHALLENGE

Wild harvesters often live in rural areas with few facilities and resources for proper handling practices. They likely harvest the plants in challenging circumstances, in the hot sun, in the cold, with mosquitos, far from roads. They are often far from running water, either for drinking or washing. They must then carry the sacks of roots and herbs for some distance. The work is difficult. Paperwork can be burdensome and overwhelming. While these communities have developed ways to manage these challenges that are passed down, new quality standards require newer handling practices. Those new to harvesting may lack training in best practices.

QUALITY STEPS WILD HARVESTERS CONTROL

- **Identity verification** — ensure correct species and plant part harvested at the correct time for the life cycle of the plant (season/age).
- **Clean collection practices:**
 - Collect the plant from a clean environment (far from runoff, pesticide drift or other sources of possible contamination).
 - Wash hands, etc.
 - Transport the plant in clean containers, new sacks, clean trucks, etc. without mixing species.
- **Point-of-harvest documentation/traceability**
- **Follow responsible & sustainable harvest practices** for each species, adhere to applicable permits and regulations (i.e. CITES, state and national regulations etc.).
- If wild harvesters are far from processing centers, they may also dry and cut or mill the material themselves. This requires additional quality challenges around good drying practices including ensuring a clean drying location, good air flow to prevent mold, free of pests, etc. Out of necessity, field dried materials are often dried in the sun, which can break down essential constituents, affecting the quality of a finished product.

DEEPER QUALITY QUESTIONS

- 1.What is the harvester actually paid?
- 2.What does a living income look like in this region? Is what they're paid above or below that line?
- 3.Is generational harvesting knowledge honored & compensated?
- 4.Do they know who uses these herbs and why?
- 5.What happens in a drought, or a price collapse and there is no longer a market for these species?

b. Farmers

Recent research has found at least 3,200 species in commercial cultivation. These numbers include all sizes of farms, from one hectare plots to several hundred. Cultivated herbs could be collected from a number of smallholders growing on 1 acre plots in India, consolidated by an aggregator, then sold, or grown in large monocrop fields. It is difficult to generalize the quality challenges farmers face since those challenges will depend on the types of practices followed. At a minimum, to produce high quality plant material, the farmers must ensure the following steps:

THE CHALLENGE

Farmers face contamination challenges that are often outside their direct control: non-point pesticide contaminations, variable soil conditions, challenging labor markets, and the difficulty of managing quality from harvest through drying and storage without consistent infrastructure.

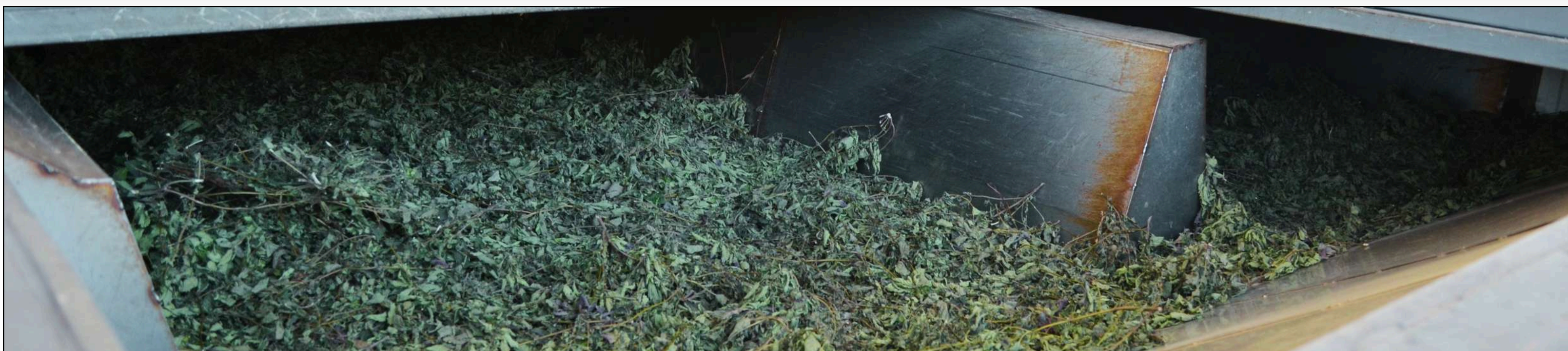
WHAT FARMERS MANAGE

(Similar to those of wild harvesters)

- Correct identification and proper harvesting time (sometimes seeds can be incorrect)
- Documentation and traceability
- Ensure soil is free of heavy metals and other potential contamination
- Manage weeds to minimize/prevent accidental adulteration of other species
- Microbial contamination — managed through harvest and post-harvest handling
- Physical hazards — extraneous matter
- Adulteration — depending on farming practices and weed management, location, neighboring practices
- Post-harvest handling (storing, packaging, drying, etc.)

DEEPER QUALITY QUESTIONS

- 1.Monoculture or polyculture? What are the impacts of farming practices on plant quality, soil health, biodiversity, and farmer health?
- 2.What farming practices exist when there's no organic certification?
- 3.How are farmworkers treated and paid?



Herbs drying in Bulgaria

STAGE THREE

Processor Level

Primary processing, aggregators, ingredient suppliers

Primary processing is the make-or-break stage in maintaining herb quality. It often occurs in the country where the herbs are harvested or cultivated. The fundamental goal of primary processing is rapid product stabilization through drying or extraction, followed by properly controlled storage. While these steps might seem straightforward, executing them properly requires exceptional attention to detail. The drying and storage phases are particularly vulnerable points where quality can be compromised. Even perfectly harvested herbs can be ruined during drying, storage, handling, shipping, or sterilization.

We include in this category processors, aggregators, and ingredient suppliers. Though these roles differ, broadly these are the actors who source from a number of different collectors and harvesters from different areas. In addition, they typically source different species of herbs, each with different drying and handling requirements which require a nuanced understanding of these variations.

PROCESSING STEPS TO MANAGE QUALITY

- Appropriate sampling to obtain a representative sample
- Identity testing by a valid scientific method
- Appropriate segregation of materials throughout handling
- Drying at correct temperatures to preserve active constituents
- Storage conditions that prevent mold, pests, and contamination
- Extraction using food-grade solvents where applicable. Ethylene oxide and radiological treatments are not allowed in organic production.
- Microbiological controls for pathogens. Herbs often lack the "kill step" that conventional foods have. This creates pressure for sterilization, but sterilization can impact the very quality that makes herbs valuable.
- GMP compliance throughout

CHALLENGES

Despite all controls, rejections still happen too often due to unavoidable circumstances. These quality investments represent real costs of production that need to be built into herb pricing going forward. Sometimes the material can be remediated. Other times it will be rejected. A buyer often won't have visibility into whether or not material has been remediated and they won't necessarily be told by the supplier about any remediation unless the supplier is asked. It is important to have a relationship with your suppliers so you can ask if anything is unique about the batch, whether it has been remediated and what the impacts of remediation are on the quality of the material.

ABSOLUTE REJECTIONS

Pesticide contamination — no remediation possible
Aflatoxins — cannot be removed

Identity failures — wrong genus/species
Severe mold contamination

POTENTIALLY REMEDIABLE

Heavy metals — may be partially addressed through extraction methods

Microbial contamination — sterilization/pasteurization options available

Physical contaminants — can often be removed

DEEPER QUALITY QUESTIONS

- 1.This is the stage most invisible to buyers — and the stage where quality is most often compromised. Herbs may have been dried on the roadside, contaminated by exhaust, mixed with other plant material, or any other practices to undermine their quality. None of this shows up in most standard testing.
- 2.Who are the processors? Are they invested in quality? Do they have long-term relationships with buyers, or do they simply sell to whoever offers the best price?
- 3.What is the incentive structure? When price is the only thing buyers compete on, processors are under constant pressure to cut corners.

STAGE FOUR

The Broker Layer

Most herb buyers — especially small manufacturers — buy from brokers, not directly from producers. This is often necessary and not inherently bad. Brokers can play an important role in managing the logistics of international trade and bringing value to brands or manufacturers. But the standard broker relationship is transactional: they find the price point you want, source to meet it, and protect their supplier relationships as proprietary. This again is where having a relationship with the broker is important to have visibility into the process.

QUALITY QUESTIONS

- Does the broker provide full traceability documentation?
- Can they provide Certificates of Analysis, country of origin, organic certification?
- Do they conduct their own quality testing or testing on receipt?
- Can the broker tell you the name of the farm or collection community? Will they facilitate a site visit? Will they share what they paid the producer?
- How does the broker respond when you push for more information? Resistance is data.
- Do they conduct onsite visits to their suppliers?

DEEPER QUALITY QUESTIONS

- Is your broker a partner in building a more transparent supply chain, or are they a gatekeeper that keeps the chain opaque?
- How would you know the difference?



Linden bark drying | Photo by l'Herbier du Diois

STAGE FIVE

The Manufacturer / Contract Manufacturer

Herbal products are formulated, sourced, and manufactured in many different ways. Some companies have led the way by establishing direct relationships with primary processors even while working within the traditional broker model. This level of involvement is uncommon in the industry.

Many brands instead work through contract manufacturers who manage everything from formulation and sourcing to extraction and bottling, keeping the brand as hands-off as possible. In these cases, the contract manufacturer does the sourcing through their existing supplier network — rarely disclosed to the brand, for fear the brand will go around them. The business model necessitates a focus on price rather than relationships. The herbs are typically bought and sold as a straight commodity, with quality assurance managed by the manufacturer's own internal standards. How rigorous those standards are varies enormously. Understanding the values and quality standards of the manufacturer you use is one of the most important quality decisions a brand can make.

CONVENTIONAL QUALITY QUESTIONS

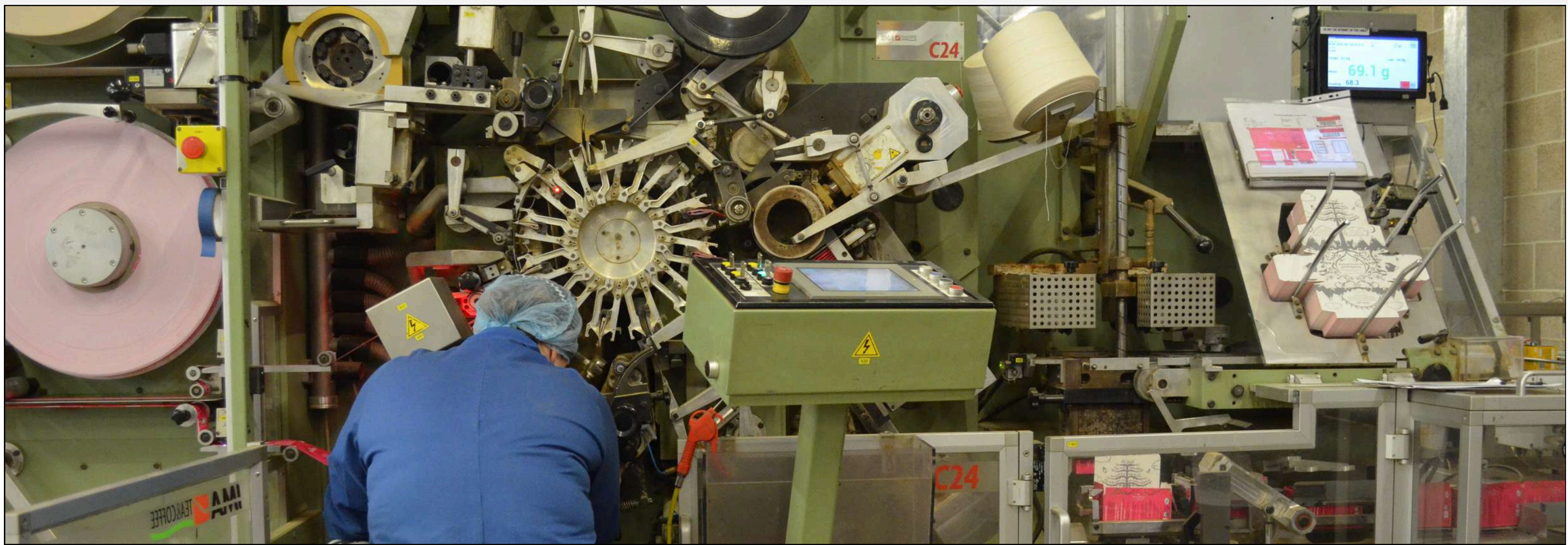
- 1.GMP compliance: documentation, SOPs, batch records, traceability.
- 2.Identity testing: organoleptic, microscopy, HPTLC, HPLC.
- 3.Purity testing: heavy metals, pesticides, microbials, aflatoxins.
- 4.Potency: constituent levels, dissolution, stability.

DEEPER QUALITY QUESTIONS

- 1.GMP compliance is a floor, not a ceiling. What does quality mean beyond compliance?
- 2.Small brands and manufacturers are often squeezed. They can't pay fair prices AND compete on price with products that don't. This is a structural problem that requires collective action.

RED FLAGS TO WATCH FOR

- Unwillingness to share specification sheets.
- Specification sheets on the manufacturer's own letterhead with no indication of origin — if you're buying a botanical, you should know where it came from and who is responsible for how it was grown, harvested, and processed.
- No in-house ingredient testing for microbials, heavy metals, or certifications. Knowing who is actually responsible for this testing is essential.
- No herbalist or botanically trained staff involved in formulation and sourcing decisions.
- The cheapest option is not often the best. Corners are being cut to bring you the lowest price. Are they corners you're willing to cut?



Tea packacking at a UK co-packer, Bristol, UK

STAGE SIX

Brands

Some brands never see the raw material or the finished products. Others are actively involved in the entire process from source to finished products and most fall somewhere in between. A brand that is actively involved in their formulation and quality assurance typically oversees the following:

QUALITY SPECIFICATIONS & TESTING

- 1. Hazard analysis required for all ingredients from farmers.
- 2. Testing required to demonstrate hazard control (testing is verification, not control itself).
- 3. Non-remediable contaminants — heavy metals, pesticides, aflatoxins (if the material fails these tests, it must be returned or disposed of).
- 4. Remediable issues — won't reject for microbial or extraneous matter, both of which can be addressed
- 5. Supplier qualification (either by a site or desk audit).

SPECIFIC QUALITY CHALLENGES

- 1. **Allergen controls** — Need proper controls for all major allergens.
- 2. **Contamination specifications**
- 3. **Identity issues** — challenging particularly with horehound/elder types where genus and species precision is critical for US regulations (though medicinally some herbs are interchangeable, commerce regulations don't accommodate herbalist perspectives).
- 4. **European sourcing complications** — mixed species lots are common unless you specifically request segregated lots.
- 5. **Certification burden** — meeting non-GMO, organic, or other certification requirements demands extensive documentation at significant cost.

REGULATORY BURDEN

- FDA inspections
- Given 15 days to address corrective actions plus implementation time
- Extensive written documentation requirements at significant expense

THE DEEPER QUESTIONS

- 1. Your name is on the label. Legally and reputationally, you own everything that happened upstream. **Does your quality program reflect that ownership?**
- 2. How has the price been determined? When you choose the lowest bid, you are making a choice about what happens at every stage above. **What does your pricing communicate to your suppliers? To your customers?**
- 3. What would it look like to use your market position to shift industry sourcing practices toward quality and transparency rather than pushing costs downward?



The Lab’s Perspective

The lab perspective is more complex than this document can address because each company can have different methods to meet their specifications. There is more detailed information on Quality Assurance and lab processes [here](#).

If material you have previously sourced doesn't pass specifications, questions to ask include:

- 1.What if anything has changed from the previous product that was tested?
- 2.Did you purchase the raw material from a different ingredient supplier?
- 3.Did the ingredient supplier purchase the material from different farmers, traders, processors than they have previously?
- 4.Did current suppliers change their farming practices?



Checking botanical identity against a Herbarium | photo by Pebani

STAGE SEVEN

The Herbalist and End User

The herbalist and end user often has little visibility into the quality of the products yet they have a unique position: they are the bridge between the supply chain and the client. They are the last person with real agency before the herb is consumed. Their recommendation carries authority. When they recommend a product, patients trust that recommendation. That authority can be used to drive demand for better-sourced products.

This [Buyer's Guide](#) produced by the Sustainable Herbs Initiative and the Institute of Natural Medicine outlines questions to ask. Below are a few general points.

THE CONVENTIONAL QUALITY QUESTIONS

- 1. Does this product work? Is it potent enough?
- 2. Is it safe?
- 3. Is it ethically sourced? (Often this means: does the label say certified organic or Fair Trade?)

THE DEEPER QUESTIONS

- 1. Energetics, harvesting conditions, intention: If you believe that these factors impact the quality of the finished herbal product, what do you know about the conditions under which the herbs you recommend are harvested? What about the intentions of the growers, harvesters and processors? Read [Following the Herbal Harvest](#) to learn more about why this matters.
- 2. Clients increasingly want to know the story of what they're taking. Practitioners can tell that story — but only if they know it themselves.
- 3. You teach patients about the healing power of relationships with plants. Are you in relationship with the value chain that provides your plants? What would it take to be?

Quality is only as strong as the relationships and economic realities at each link. Building these relationships across all seven stages — from plant to end user — is the work this toolkit invites us into.

SHI QUALITY & SUSTAINABILITY WORKING GROUP



CHAPTER TWELVE

Marketing as a Primary Processor

The following section is written by Nikita Agarwal of [Herb Artizan](#), based on her own marketing journey as a primary processor.

What Makes You Different

Go deeper than “we sell high-quality botanicals.” Everyone says that.

SOURCING

Your connection to the origin. The people who grow and collect the plants. The story behind the material.

PROCESSES

Your critical quality controls. Your quality systems and machines. The proof that you manage it well. The documentation that backs it up.

PEOPLE

Transparency about who is handling products and under what conditions. Names, faces, conditions, qualifications, and training.

Ask yourself:

*What do we do that a buyer couldn't find anywhere else?
That's your value. Make it visible.*

Marketing for me is a form of expression. I stepped into marketing because I had a notebook full of ideas and wanted to share them. As a PhD student, I had learned how to convey my thinking in a PowerPoint, but that was about it. At first, I thought, “I can just drop my ideas into a Canva template and it’ll work.” But it didn’t.

I learned through doing, that putting words and images together doesn’t cut it. It starts with deciding which ideas matter most, shaping them in a way that connects, and knowing exactly who you’re talking to. For primary processors, this means focusing on one clear message at a time. The more specific you are, the more it is likely to resonate with the reader.

I also had to overcome the mental roadblocks—telling myself I wasn’t trained in this, that I shouldn’t be in a field I knew nothing about. The truth is, marketing is a skill like any other: you can learn it step by step. And if you work in a part of the supply chain that’s rarely seen, you have something more valuable than a “professional” agency: access to real stories, real experience, and a real stake in the outcome.

My learning journey started with the fundamentals.

Understanding the Customer's Journey

I call this a lesson in empathy. Thinking about the customer’s journey means putting yourself in their shoes and anticipating what they’ll be looking for.

To know what customers are looking for, I had to be where they were: trade shows, online groups, even by watching what customers and competitors are posting. For primary processors, this can mean spending time in the markets where your buyers operate, reading what they read, and asking them directly about their needs.

One thing I’ve learned: you can’t expect buyers to automatically see the value in higher quality or better practices. You have to walk them through what’s at stake if they choose a cheaper option. That might be a shorter shelf life, a higher risk of rejection, or a lost relationship with the community that grew the plant.

SHI helped here. I now feel confident in this role and can show (not just tell) how we address some of these challenges. And **showing always works better than saying.**

Building a Brand Voice

With that understanding, I could finally create what supply network partners wanted to see. But that didn’t mean I could post however I wanted. It’s never that simple. Which led me to the next big lesson - **building a brand voice.**

I learned that branding doesn’t mean slapping a logo on a post, or adding a tagline, or a certification badge. Branding is a persona. It has a voice and values. It has to have a reputation, just like a person.

For processors, your brand is how people feel when they hear your company’s name or open an email from you. It’s our products, but also our promises and whether we keep them. We don’t have to come off as perfect. It’s understanding our tradeoffs and communicating them on our website. If we want to build long-term buyer relationships, our voice needs to carry the same values we uphold in our work: respect, honesty, and clarity.

Clarifying the Value

Once I understood what customers wanted and how to speak to them, I had to answer the hardest question: what do we do that truly matters?

For us, the answer is threefold:

- Sourcing: our connection to the origin and the people who grow and collect the plants.
- Processes: because people care about quality and need proof that you control it.
- People: transparency about who is handling their products and under what conditions.

If you’re a primary processor, defining your value means going deeper than “we sell high-quality botanicals.” Everyone says that. Instead, ask: what do we do differently that a buyer couldn’t find anywhere else? And then, make that the backbone of your marketing.

Making your work visible

Marketing is a craft, and like any craft, it improves with practice. You don’t need a big budget or a design team. We can find simple ways to show what we do. Good photos of drying sheds, short videos of harvesting, post-harvest storage or a one-page chart explaining our process all help buyers see our reality.

The tools don’t have to be complicated. A phone camera, a free design app, or even a well-structured PDF can go a long way. It's clarity that matters. Buyers want to see the steps, the people, and the conditions behind the herbs they buy.

For primary processors, marketing is a part of building relationships and ensuring our work is seen and valued. The best marketing we can do is to show, visually and concretely, how we work and what changes because of it. For this we need to:

- 1. Show:** Make the invisible parts of your work visible.
 - Process photos/videos: Drying sheds, washing stations, or storage facilities. Simple phone photos or short clips can do this.
 - Batch transparency: QR codes linking to origin, harvest dates, lot IDs, or permits.
 - Side-by-side examples: e.g., “this batch was properly dried, here’s what it looks like” versus “this is what happens when drying is delayed.”
 - Worker stories: Share who harvested, who handled, who packed. This need not be in a romanticized way, only to acknowledge labor and conditions.
- 2. Measure:** Quantify what matters in your operation. Processors are using software like KoboToolbox for Impact Analysis. This helps field technicians to record tasks, gather surveys, and share images on-site.
 - Quality metrics: Moisture %, microbial load, pesticide residues, and extraction yield.
 - Processing data: Drying temperature/time, cut size, rejection rates, contamination control.
 - Social & economic data: Days-to-pay, premiums paid, % of advance payments, or number of training sessions delivered.
 - Environmental data: Waste reused (pelletizing powder, composting), energy used in drying, co-products developed.

3. **Verify:** Back up your claims with credible checks. Marketing should be guided by validated data.

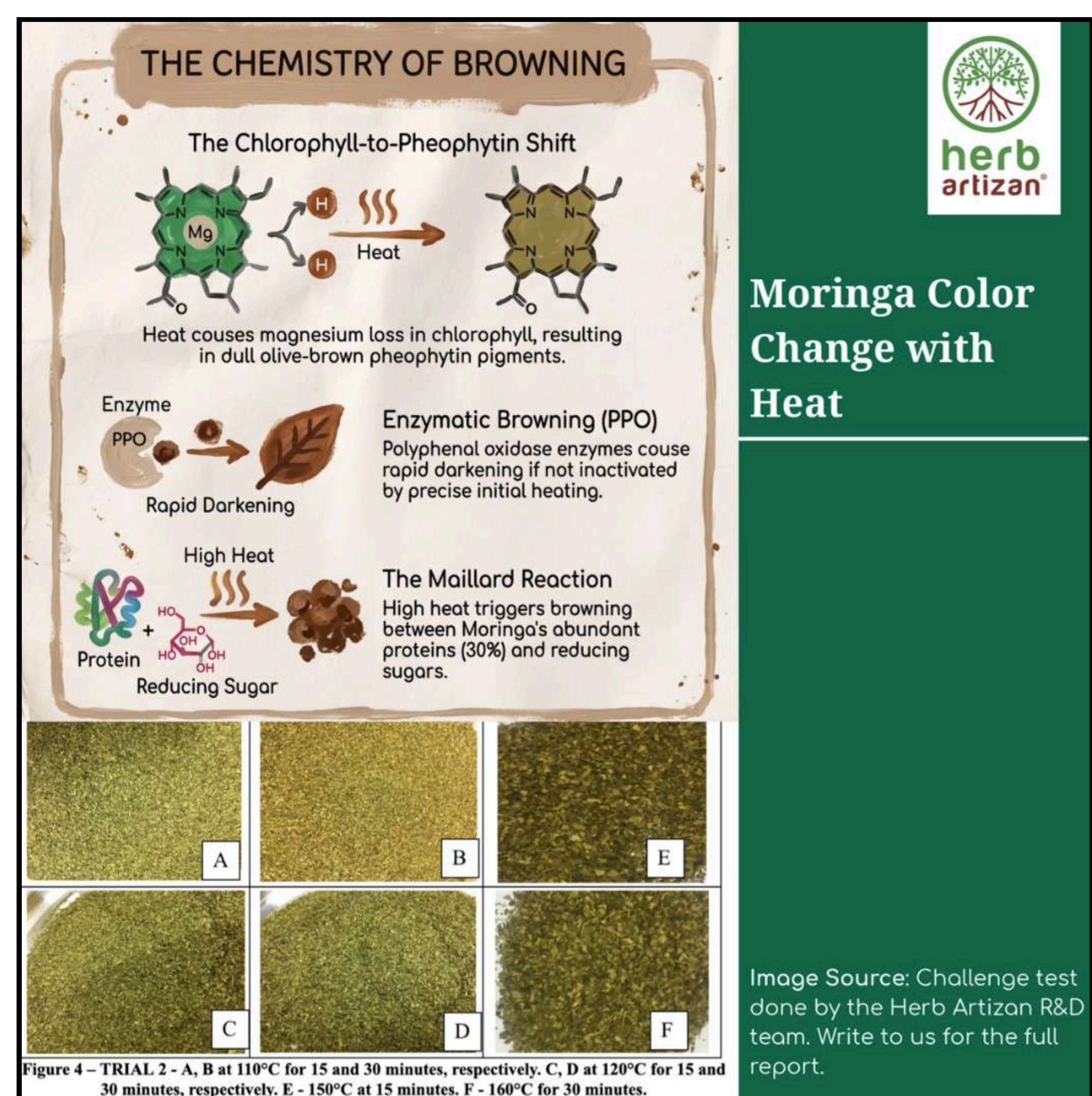
- Internal verification: In-house QC records, batch sheets, lab logs.
- Peer verification: Share cost or process templates with other processors to compare ranges. As an example, the SHI working group discussed using common cost-analysis formats and even pie charts to show the breakdown of expenses.
- External verification: Certifications (organic, FairWild, FFL) or independent labs. Even if not all buyers demand it, it signals rigor.
- Cross-check with buyers: Share lab results or process data and invite feedback. If your drying parameters match their food safety requirements, that counts as verification.

4. **Improve:** Use what you've shown, measured, and verified to do better over time. This type of marketing approach can help improve the organization.

- Feedback loops: When testing reveals high microbial loads, adjust drying design. Or if material losses in sorting are high, experiment with cleaner collection methods.
- Shared learning: Small changes like low-tech field driers can reduce costs. Documenting and sharing these improvements strengthens everyone.
- Efficiency gains: Cost accounting can highlight “hot spots” (e.g., transport, energy use). Shifting some steps closer to source may reduce both costs and carbon footprint.

When you can show, measure, verify, and improve — buyers will eventually notice.

NIKITA AGARWAL • HERB ARTIZAN



Examples of Herb Artizan marketing material that uses marketing as a tool for education.



CHAPTER THIRTEEN

A Certifications Reference Guide for Primary Processors

Navigating certification in the herbal supply chain can be complex. SHI has compiled this section as an introduction to the certifications most relevant to the botanical industry, not as a comprehensive guide, but as a starting point for understanding the landscape. This content was developed with AI assistance and manually reviewed for accuracy; any overstatements or inaccuracies were revised. Always refer to the certifying body's website for current requirements.

Note: *all cost figures in this section are indicative ranges only. Actual costs vary significantly by geography, company scale, and certifier. Internal implementation costs (staff time, system upgrades, training) are often not included in quoted fee ranges but can exceed the audit cost itself. Cost figures in this guide reflect what primary processors (not farms) typically pay unless otherwise stated. For some certifications, the distinction between certification and registration matters: primary processors may not be eligible for full certification and instead register as licensed handlers or registered traders. This distinction is flagged in the relevant entries.*

SECTION ONE

Sustainability & Environmental Certifications



1% for the Planet
Commit 1% of annual revenue to environmental causes

- **Who it is for:** Brands, processors, distributors at any scale. Not a product certification but a membership commitment.
- **What it covers:** A pledge to direct 1% of annual revenue to vetted environmental non-profits. Does not assess supply chain practices.
- **Certification costs:** Contribution is 1% of annual revenue and may be paid in cash, in-kind product, or approved services, subject to the program's current rules. Application and admin fees vary.
- **Where fees go:** Directly to approved environmental non-profits chosen by the member. 1% for the Planet vets recipients.
- **Premium pricing reality:** Does not itself justify a price premium at the ingredient level. A brand credential, not a supply chain standard.
- **Volume reality:** No volume implications. Open to all.
- **Tangible benefits:** Credible, externally verified commitment to environmental giving. Useful for brand storytelling and B2B differentiation. Low-friction entry into sustainability signalling.
- **Limitations & drawbacks:** Does not verify supply chain practices, labour conditions, or biodiversity impact. No requirements on how you source. Risk of greenwashing perception if not paired with substantive supply chain standards.
- **Best suited for:** Brands and processors looking for an accessible, low-complexity entry-point sustainability credential.



Seeing the big picture, Costa Rica



B Corp Certification

Holistic ESG certification covering environment, workers, community, customers & governance

- **Who it is for:** Companies of any size across the supply chain — brands, processors, distributors.
- **What it covers:** Comprehensive assessment via the B Impact Assessment (BIA) covering environmental impact, worker wellbeing, community engagement, customer accountability, and governance. Minimum score of 80/200 required.
- **Certification costs:** Annual fees are revenue-based and range from about USD 1,000 for smaller companies to USD 50,000+ for large companies. Three-year recertification cycle with fee each time.
- **Where fees go:** B Lab (certifying body) funds assessment infrastructure, standards development, and advocacy work.
- **Premium pricing reality:** No guaranteed premium at the ingredient level. Primarily a brand credential that may support buyer preference and pricing power at the finished product level. Increasingly requested by retail partners, though adoption varies by sector.
- **Volume reality:** No volume requirements. Growing demand from retailers and conscious consumers means B Corp status can influence sourcing partnerships.
- **Tangible benefits:** Globally recognised; increasingly required for retail/wholesale partnerships. Forces internal review of worker conditions, environmental practices, and governance. Can improve employee recruitment and retention.
- **Limitations & drawbacks:** Assessment is self-reported and weighted broadly; a high score in governance can offset a low score in environmental practices. Does not specifically address botanical supply chain traceability or wild harvest. Supply chain impacts can be undercounted for ingredient-level companies.
- **Best suited for:** Brands and mid-to-large processors committed to a comprehensive ESG approach and seeking a credential recognised by brand buyers.



Rainforest Alliance (RFA)

Biodiversity conservation and sustainable livelihoods across agricultural supply chains

- **Who it is for:** Farms, cooperatives, and processors dealing with tropical agricultural crops (coffee, cocoa, tea, herbs from tropical origins).
- **What it covers:** Sustainable agriculture standard covering biodiversity conservation, climate resilience, human rights, and farm management. The 2020 standard introduced a percentage-based labelling model.
- **Certification costs:** Certification through licensed certifiers; costs vary by certifier, country, and operation type. Farm certification: rough range USD 500–5,000 per year. Supply chain actor verification for processors (covering chain of custody and trading practices) is typically lower than farm certification but varies by certifier and volume. Certification bodies set their own fee schedules.
- **Where fees go:** Certifiers (auditing bodies) retain fees; Rainforest Alliance invests in standards development and market programmes.
- **Premium pricing reality:** Premiums are inconsistent and often disappointing at the farm level. A 2023 review reported premiums of USD 0.05–0.10/kg for some commodities, though these are often absorbed by traders. The link between consumer premium pricing and farm-level benefit is frequently broken.
- **Volume reality:** Established demand in coffee/cocoa/tea; weaker in herbal botanicals. Useful if supplying to large European or North American brands with sourcing requirements.
- **Tangible benefits:** Third-party verification of sustainability practices. Recognised by major international buyers. Provides market access to buyers with sustainability sourcing requirements. Biodiversity monitoring built into the standard.
- **Limitations & drawbacks:** Premium rarely reaches the farm in full. Auditing burden can be heavy for small farms. The percentage-labelling model (e.g. 'X% Rainforest Alliance Certified') has been criticised for allowing low-certified content claims. Impact on biodiversity depends heavily on implementation quality.
- **Best suited for:** Processors and farms supplying European/North American brands with mandatory sustainability sourcing policies for tropical ingredients.



UEBT (Union for Ethical BioTrade)

Sourcing with respect for biodiversity, people, and local knowledge

- **Who it is for:** Companies across the supply chain dealing with wild-harvested, cultivated, or biodiversity-sourced ingredients.
- **What it covers:** 7 Principles of BioTrade covering biodiversity conservation, sustainable use, fair and equitable benefit-sharing, socioeconomic sustainability, compliance with national and international law, respect for actors' rights, and clarity on land and resource rights.
- **Certification costs:** Membership fees plus third-party audit costs. UEBT membership ranges roughly EUR 3,000–15,000+/year depending on company size; audit costs additional and vary by certifier.
- **Where fees go:** UEBT uses membership fees for standards work, capacity building, and policy advocacy. Audit fees go to certified auditors.
- **Premium pricing reality:** Not primarily a price-premium certification; it focuses on ethical sourcing rather than fixed market premiums. However, it can support premium positioning with brands that have UEBT sourcing commitments.
- **Volume reality:** Growing recognition among European brands (particularly in cosmetics and health). Demand is building but still niche in botanical ingredients.
- **Tangible benefits:** Strong standard for biodiversity and benefit-sharing — one of the most rigorous. Supplier visits through UEBT reportedly generate more openness than standard buyer audits (noted by BlueSky Ellie). Access to UEBT-committed brand buyers. Framework encourages genuine long-term relationships.
- **Limitations & drawbacks:** Complex and demanding to implement, particularly benefit-sharing requirements. Small companies and farmers may find the administrative burden significant. Market demand, while growing, is still limited in many botanical categories.
- **Best suited for:** Processors with wild-harvested or biodiverse ingredients supplying cosmetic, nutraceutical, or specialty food brands with explicit UEBT sourcing policies.



FairWild

Sustainable wild collection of plants, fungi, and lichens

- **Who it is for:** Specifically designed for wild collection supply chains. Certification is for wild collection operations (harvesters). Processors and traders working with FairWild-certified material register as FairWild registered traders; they do not receive certification themselves.
- **What it covers:** Standard covering ecological sustainability of wild harvest, social and economic conditions for wild collectors, and business/quality management. Requires population monitoring and collection limits.
- **Certification costs:** Important for processors: FairWild certification applies only to wild collection operations. Processors handling FairWild-certified material register with the FairWild Foundation as registered traders. This involves signing the FairWild Trading Rules, submitting annual declarations of certified material bought and sold, and paying an annual registration fee. The audit costs above (USD 1,000–8,000) apply to the wild collection operation. Processor registration fee (USD 150-900).
- **Where fees go:** Certifiers retain audit fees; FairWild Foundation invests in standard development and wild harvest research.
- **Premium pricing reality:** FairWild premium is contractually built into the standard: buyers of FairWild-certified material are required to pay a social premium that goes directly to wild collectors. Actual income impact varies by context. This is one of the few certifications with a mandatory, trackable premium flow.
- **Volume reality:** Niche but growing; demand concentrated in European herbal, cosmetic, and supplement brands with sustainability commitments. Limited mainstream demand.
- **Tangible benefits:** The only standard specifically designed for wild harvest. Mandatory social premium with direct flow to collectors. Ecological monitoring built in. Increasingly required by European brands with access-and-benefit-sharing (ABS) compliance requirements under the Nagoya Protocol.
- **Limitations & drawbacks:** Small market; relatively few buyers actively requiring it. High cost-to-reward ratio for small operations if buyer demand is not established in advance. Ecological monitoring (population assessments) is technically demanding.
- **Best suited for:** Processors sourcing wild-harvested botanicals who want to supply European brands with FairWild sourcing requirements — especially in medicinal herbs. Note: processors register as traders rather than certifying. The value to the processor is in being able to supply certified material to brand buyers.



Carbon Neutral / Climate Neutral Certification

Measures, reduces, and offsets greenhouse gas emissions

- **Who it is for:** Companies at any supply chain level seeking to verify and communicate climate impact.
- **What it covers:** Measurement of Scope 1, 2, and 3 greenhouse gas emissions; reduction planning; offsetting of remaining emissions through verified carbon credits. Multiple standards exist (PAS 2060, Climate Neutral, Carbon Trust, etc.).
- **Certification costs:** Varies significantly by standard and company size. Measurement and verification: USD 5,000–30,000+. Offset costs depend on volume of emissions and credit type (typically USD 5–25/tonne CO₂e). Ongoing annual costs for recertification.
- **Where fees go:** Verifiers retain audit fees; offset payments fund carbon reduction projects (forestry, clean energy, etc.). Quality varies greatly between offset types.
- **Premium pricing reality:** Limited direct price premium at ingredient level currently. Growing importance for European buyers due to CSRD (Corporate Sustainability Reporting Directive) requirements, which is increasing market relevance.
- **Volume reality:** Not a volume-based credential. Growing buyer requirement, especially from European brands with scope 3 emission reduction commitments.
- **Tangible benefits:** Increasingly required by brands with net-zero commitments (Scope 3 from supply chain). Provides baseline data for internal improvement. Supports access to impact-driven retail and brand partners.
- **Limitations & drawbacks:** Quality of carbon offsets varies enormously — some have been shown to deliver little actual impact. Scope 3 measurement in botanical supply chains is complex (drying methods can be a major emissions source). Certifications are not standardised — multiple competing standards with different rigour.
- **Best suited for:** Processors supplying European brands subject to CSRD requirements, or brands that have made net-zero commitments requiring supply chain data.



ISO 14001

International standard for environmental management systems

- **Who it is for:** Processing facilities and companies of any size seeking a systematic approach to managing environmental responsibilities.
- **What it covers:** Framework for identifying environmental impacts, setting objectives, implementing controls, and continually improving environmental performance. Not product-specific — applies to the management system of the organisation.
- **Certification costs:** External audit and certification: USD 3,000–15,000+ depending on company size and certifier. Annual surveillance audits required (typically USD 1,000–2,000/year). Internal implementation costs (staff time, training) can be significant.
- **Where fees go:** Accredited certification bodies (auditors). ISO does not receive revenue from individual certifications.
- **Premium pricing reality:** Not a buyer-facing premium driver. Mainly a B2B requirement for larger processing contracts or supplier qualification programmes of major brands.
- **Volume reality:** Relevant for large contract manufacturing relationships. Less commonly required in smaller herbal ingredient trades.
- **Tangible benefits:** Systematic approach to environmental management reduces waste, energy use, and regulatory risk. Required for some large buyer supplier qualification programmes. Supports ISO 9001 (quality) integration.
- **Limitations & drawbacks:** Assesses the management system, not the actual environmental outcomes. A well-documented but poorly performing company can pass. Resource-intensive for smaller processors. Limited consumer-facing value.
- **Best suited for:** Mid-to-large processing facilities with significant environmental footprints (energy, water, waste) supplying large commercial buyers.

SECTION TWO

Quality, Safety & Manufacturing Certifications



GMP (Good Manufacturing Practices)

Foundation standard for consistent, quality-assured manufacturing

- **Who it is for:** All herbal processors, manufacturers, and packers — effectively mandatory for supplying dietary supplement, food, and pharmaceutical buyers in major markets.
- **What it covers:** Facility cleanliness, equipment calibration, batch records, personnel training, quality control systems, and product testing. Multiple GMP standards exist (FDA 21 CFR Part 111 for US dietary supplements; EU GMP for pharma; WHO GMP; NSF GMP).
- **Certification costs:** Third-party GMP audit: USD 3,000–15,000 per audit depending on scope and certifier. Internal implementation costs (documentation, training, equipment) can be substantial.
- **Where fees go:** Accredited third-party auditors. NSF, UL, SGS, and similar bodies are common certifiers.
- **Premium pricing reality:** Not a premium driver per se — it is a baseline market access requirement. Without GMP, you cannot supply most US or EU dietary supplement buyers. It is the floor, not the ceiling.
- **Volume reality:** Required regardless of volume for most regulated market channels.
- **Tangible benefits:** Essential for market access in US, EU, Canada, and Australia. Reduces batch failure rates and recall risk. Provides documented traceability for quality issues. Required by virtually all quality-focused buyers.
- **Limitations & drawbacks:** Focused on manufacturing process, not raw material origin or sustainability. Multiple competing GMP standards with varying rigour. Audit findings can be inconsistently applied. Does not address supply chain ethics or environmental practices.
- **Best suited for:** Any processor exporting to regulated markets. Non-negotiable for US and EU dietary supplement supply chains



ISO 22000 / FSSC 22000

International food safety management system — especially important for export

- **Who it is for:** Processors, co-manufacturers, and ingredient suppliers in food and dietary supplement supply chains.
- **What it covers:** Food safety hazard analysis, prerequisite programmes, traceability, and management system requirements. FSSC 22000 is GFSI (Global Food Safety Initiative) recognised — a higher-trust standard for large retailer and brand supply chains.
- **Certification costs:** Certification: USD 5,000–20,000+ depending on facility size and certifier. Annual surveillance audits. Internal implementation is resource-intensive and implementation costs often exceed audit costs.
- **Where fees go:** Accredited certifiers; FSSC 22000 also charges a scheme fee.
- **Premium pricing reality:** Primarily a market access requirement for large retail supply chains rather than a premium driver. GFSI recognition increasingly required by large European and US food/supplement buyers, though not universal across all supply chains.
- **Volume reality:** Commonly required by major retail supply chains. High-volume ingredient suppliers are increasingly expected to hold FSSC 22000 or equivalent GFSI-benchmarked certification.
- **Tangible benefits:** GFSI recognition opens doors to major retailers and brands with strict supplier qualification criteria. Reduces second-party auditing burden (one audit, multiple buyer acceptance). Strong framework for food safety risk management.
- **Limitations & drawbacks:** Heavy documentation burden. Primarily focused on food safety — does not address sustainability, sourcing ethics, or biodiversity. Cost-prohibitive for small operations.
- **Best suited for:** Mid-to-large processors targeting large retail or brand customers with GFSI purchasing requirements.



HACCP

Systematic preventive approach to food safety hazard control

- **Who it is for:** Processors and manufacturers — typically a component of GMP and ISO 22000 rather than a standalone certification.
- **What it covers:** Seven principles: hazard analysis, critical control points (CCPs), critical limits, monitoring, corrective action, verification, and record-keeping. Covers biological, chemical, and physical hazards.
- **Certification costs:** Usually embedded in GMP or ISO 22000 certification. Standalone HACCP plan development: USD 1,000–5,000 in consultant fees. Third-party HACCP verification audits: USD 1,500–5,000.
- **Where fees go:** Certifiers and consultants. Codex Alimentarius (the international HACCP standard body) is publicly funded.
- **Premium pricing reality:** Not a premium driver. Regulatory baseline in many jurisdictions.
- **Volume reality:** Required regardless of volume for food-grade processing.
- **Tangible benefits:** Core tool for identifying and controlling food safety risks before they cause failures. Legally required in many markets. Reduces liability. Integrated into GMP and ISO 22000.
- **Limitations & drawbacks:** Addresses manufacturing hazards — not sourcing, sustainability, or social conditions. Highly documentation-intensive. Effectiveness depends on quality of implementation and auditing.
- **Best suited for:** All food-grade processors as a baseline requirement, usually nested within a broader GMP or ISO 22000 framework.



GACP (Good Agricultural & Collection Practices)

Specifically designed for herbal raw material quality and identity

- **Who it is for:** Farms and primary processors of medicinal herbs — the most relevant quality standard specifically designed for the herbal sector.
- **What it covers:** WHO GACP guidelines cover: seed and plant selection, cultivation conditions, irrigation, harvesting, post-harvest handling, drying, storage, and documentation. Also covers good collection practices for wild-harvested material.
- **Certification costs:** No formal global certification body — WHO GACP is a guideline, not a certification standard. There is no standardisation across certifiers, so scope and rigour vary. Third-party GACP audits are offered by some certifiers (e.g., ECOCERT, Intertek): USD 2,000–8,000 per audit.
- **Where fees go:** Auditing bodies. WHO does not charge for the guideline.
- **Premium pricing reality:** GACP documentation can support premium pricing in quality-focused markets, particularly in European pharmaceutical and herbal supplement supply chains. Growing requirement from EU botanical brands.
- **Volume reality:** Increasingly required by European buyers for medicinal herb supply chains. Growing demand but not yet universal.
- **Tangible benefits:** Directly addresses the most common herbal quality failure points (drying, storage, contamination, identity). Provides documented evidence of cultivation and collection practices. Required for EU herbal medicinal product supply chains.
- **Limitations & drawbacks:** No single universal certification standard — GACP documentation is not consistently recognised across buyers. Auditing availability is uneven, especially in developing countries. Does not address social or environmental conditions comprehensively.
- **Best suited for:** Primary processors of medicinal herbs supplying European pharmaceutical, supplement, or herbal tea brands.



US FDA Registration

Mandatory registration for facilities exporting food and supplements to the US

- **Who it is for:** Any facility (globally) that manufactures, processes, packs, or holds food or dietary supplements for US consumption.
- **What it covers:** Facility registration under the Bioterrorism Act (Section 415 of the FD&C Act) — not a quality certification but a legal requirement. Requires biennial renewal.
- **Certification costs:** Registration itself is free via FDA's web portal. Third-party facilitation services charge USD 300–1,000. Ongoing compliance costs (documentation, potential FDA inspection) can be significant.
- **Where fees go:** No fee to FDA for registration. Costs are primarily internal compliance.
- **Premium pricing reality:** Not a premium driver. A baseline legal requirement for US market access.
- **Volume reality:** Required for any US export regardless of volume.
- **Tangible benefits:** Enables legal supply to the US market. Required by all US buyers. FDA registration number is a standard supplier qualification datapoint.
- **Limitations & drawbacks:** Registration does not equal approval or endorsement — FDA does not inspect all registered facilities. Does not verify quality standards.
- **Best suited for:** Any processor with US market ambitions — non-negotiable.

SECTION THREE

Organic & Regenerative Certifications



USDA Organic

The standard for organic export to the United States

- **Who it is for:** Farms and primary processors seeking to export organic-certified herbs and botanicals to the United States.
- **What it covers:** Prohibition of synthetic fertilisers, pesticides, GMOs, irradiation. Soil and water conservation. Processes and documentation for multi-ingredient products. Annual inspection and audit. Primary processors handling organic material must obtain USDA NOP handler certification (separate scope from farm). Handler certification is done through USDA-accredited certifiers and covers the processing facility, handling procedures, and product lines.
- **Certification costs:** USD 700–3,000+ per year depending on size, number of products, and operation scope. The USDA cost-share programme (up to 75%, capped at \$750/year) applies to handlers as well as farms.
- **Where fees go:** USDA-accredited certifying agents. NOP (National Organic Program) sets standards; certifiers verify compliance.
- **Premium pricing reality:** Organic premiums are real but variable. Conventional-to-organic price ratios of 1.2x–3x are noted across herb categories, though these are category-dependent estimates and not guaranteed — the premium depends on supply/demand dynamics in each specific category.
- **Volume reality:** Large and established. US organic herb and supplement market is significant. However, fraud concerns (SOE enforcement) are tightening and complexity is increasing.
- **Tangible benefits:** Access to large US organic market. Price premium where market demand supports it. Consumer recognition by major natural food and supplement brands.
- **Limitations & drawbacks:** Certification fraud has been a documented problem, particularly from former SOE (Strengthening Organic Enforcement) target organisations. Added due diligence requirements increasing.
- **Best suited for:** Any processor or farm targeting the US natural and organic market — one of the highest-volume organic markets globally.



EU Organic

European Union organic certification — required for EU market access

- **Who it is for:** Farms and processors exporting to EU member states.
- **What it covers:** EU Regulation 2018/848 — comprehensive organic standards covering production, labelling, import rules, and controls. Third-country operators must be certified by an approved EU control body.
- **Certification costs:** Annual certification of processing facilities by EU-approved control bodies: EUR 1,000–5,000+ per year, depending on facility scope, number of product lines, and certifier. Farm certification (EUR 500–3,000+) is a separate scope and is not what processors pay. Bodies include ECOCERT, Bioagricert, Soil Association (UK), IMO, and others.
- **Where fees go:** EU-approved control bodies. Member state governments fund the regulatory oversight.
- **Premium pricing reality:** EU organic premiums are meaningful, particularly for herbal and botanical ingredients. However, as with USDA, the premium depends on category supply/demand. Some herbs have commoditised even at organic level.
- **Volume reality:** EU organic herbs/botanicals market is large and growing — particularly in Germany, France, and the Netherlands. Strong demand from European herbal supplement, tea, and cosmetics brands.
- **Tangible benefits:** Market access to the EU organic market. Strong consumer recognition. Required by most European organic brand buyers. EU Organic logo is highly trusted.
- **Limitations & drawbacks:** Import controls for third-country operators are bureaucratically complex. Equivalency arrangements can change — the EU-US organic equivalency arrangement has been renegotiated. Does not verify social conditions or biodiversity outcomes.
- **Best suited for:** Farms and processors in primary growing countries targeting EU herbal, supplement, or organic food markets.



**Regenerative
Organic
Certified®**

Regenerative Organic Certified (ROC)

Gold standard building on organic with soil health, animal welfare, and social fairness

- **Who it is for:** Farms and forward-thinking processors seeking the most rigorous sustainability credential.
- **What it covers:** Three pillars: soil health and land management (building on USDA Organic); animal welfare (Certified Humane or higher); and farmer and worker fairness (Fairtrade or similar). Tiered: Bronze, Silver, Gold.
- **Certification costs:** Important for processors: ROC certification applies only to farms — primary processors do not receive ROC certification. Processors handling ROC-claimed material register as licensed handlers with the Regenerative Organic Alliance (ROA).
- **Requirements:** underlying USDA Organic or approved equivalent certification is mandatory.
- **Handler registration costs:** one-time application fee USD 350–550, plus an annual license fee of 0.1% of gross revenue from ROC-claimed products (range USD 400–10,000; minimum USD 400). Internal chain-of-custody systems are required.
- **Where fees go:** Regenerative Organic Alliance (non-profit) and accredited certifiers.
- **Premium pricing reality:** ROC products can command significant premiums (reported 30–100%+ over conventional in niche, high-end market segments only). These figures should not be assumed broadly — the market is still small and concentrated in mission-driven brands. Scaling the premium remains a challenge.
- **Volume reality:** Small but rapidly growing. Pioneer brands (Patagonia Provisions, Dr. Bronner's) have driven early adoption. Growing interest from major natural food and supplement brands.
- **Tangible benefits:** Most comprehensive agricultural sustainability certification available. Strong brand differentiation. Addresses soil health (a genuine issue for long-term ingredient supply). Social justice requirements built in. Growing consumer and retail recognition.
- **Limitations & drawbacks:** High cost and implementation complexity. Small certified supplier base limits supply options. Market still developing — premium is not universally achievable. Requires existing organic certification.
- **Best suited for:** Progressive farms and processors positioned at the premium end of the market, with brands that can communicate the ROC story to consumers.



Canadian Organic (COR)

Canadian Organic Regime — required for organic labelling in Canada

- **Who it is for:** Farms and processors exporting organic products to Canada.
- **What it covers:** CAN/CGSB-32.310 standard. Canada has equivalency arrangements with the EU and USA — USDA NOP certified products can enter Canada without re-certification.
- **Certification costs:** CAD 1,000–5,000+ per year through accredited certifiers. If already USDA NOP certified, COR may be obtained through the equivalency arrangement at reduced cost.
- **Where fees go:** Accredited certification bodies. AAFC (Agriculture and Agri-Food Canada) oversees the programme.
- **Premium pricing reality:** Canadian organic market is smaller than the US but growing. Premiums are similar to USDA Organic in equivalent categories.
- **Volume reality:** Moderate volume market. Important for processors with Canadian brand customers.
- **Tangible benefits:** Required for Canadian organic market access. Equivalency with USDA NOP and EU Organic simplifies multi-market certification.
- **Limitations & drawbacks:** Relatively small market. If already USDA NOP certified, the incremental value of explicit COR certification is limited.
- **Best suited for:** Processors with Canadian brand customers, or those leveraging USDA NOP equivalency for Canadian market entry

SECTION FOUR

Fair Trade, Social & Ethical Certifications



Fairtrade International (FLO)

Fair wages, worker rights, and democratic producer organisations

- **Who it is for:** Farmer cooperatives and estates in developing countries; processors and traders handling Fairtrade-certified ingredients.
- **What it covers:** Fairtrade Minimum Price (a floor price protecting farmers from market collapse); Fairtrade Premium (additional sum paid to producer organisation for community investment); democratic organisation requirements; child and forced labour prohibitions; environmental standards.
- **Certification costs:** Producer certification: EUR 2,000–6,000/year for cooperatives, depending on size. Note: first-year costs are typically higher, as they include application fees on top of certification fees. Trader and processor licences: EUR 1,000–5,000+/year depending on volume. Licence fees apply when using the Fairtrade label.
- **Where fees go:** Fairtrade International (standards and governance); Fairtrade Premium goes directly to producer organisations. Licence fees fund Fairtrade’s operations and market development.
- **Premium pricing reality:** Fairtrade premium is contractually mandated — not discretionary. Buyers of Fairtrade certified goods must pay the published Fairtrade Minimum Price and the Premium on top. Premium amounts are commodity-specific and set by Fairtrade International (e.g., USD 0.20–0.50/kg above market for some commodities — not a general rule). However, evidence on whether premiums fully compensate for certification costs and translate to living incomes is mixed.
- **Volume reality:** Strong demand in European mainstream retail (particularly UK, Germany, Switzerland). Growing in the US. Category coverage concentrated in coffee, cocoa, bananas, cotton — herbal teas and botanicals have limited mainstream Fairtrade market.
- **Tangible benefits:** Mandatory and audited premium flow to producers. Democratic producer organisation requirements build community capacity. Mainstream retail recognition drives volume. Strong child labour and forced labour protections.
- **Limitations & drawbacks:** Premium often insufficient to reach living wage in many origins. Administrative burden on cooperatives is significant. Market demand for Fairtrade botanicals (outside tea) is limited. Some critics argue the cooperative model excludes individual smallholders not in certified organisations.
- **Best suited for:** Processors working with cooperative-organised farmers supplying European mainstream retail brands with Fairtrade sourcing requirements.



Fair for Life (FFL)

Fair trade and social responsibility for diverse supply chains

- **Who it is for:** Companies across the supply chain, including individual farms, processors, and brand owners — more flexible than Fairtrade International in the types of operations it covers.
- **What it covers:** Social responsibility and fair trade requirements across three areas: responsible business practices (for non-agricultural companies), fair trade with farmers and workers, and fair trade with small farmer groups. Covers all ingredients and product types — more flexible than Fairtrade FLO.
- **Certification costs:** Certification by IMO (a leading certifier): fees vary by company size and scope. Rough range USD 2,000–10,000+/year for combined fair trade audit and social audit.
- **Where fees go:** IMO (Institut für Marktökologie) and Ecocert (the two main certifiers). Premium flows directly to producer groups.
- **Premium pricing reality:** Requires a social premium paid to producer groups — amount is negotiated rather than fixed (unlike Fairtrade FLO). This flexibility is both a strength (context-appropriate) and a significant risk: where negotiating power is unequal, premiums can be set low or inconsistently applied. Premiums should not be assumed in commercial planning without explicit contractual commitments.
- **Volume reality:** Smaller market than Fairtrade FLO but growing, particularly in cosmetics, personal care, and specialty food. Recognised by Dr. Bronner's, Weleda, and similar brands.
- **Tangible benefits:** More flexible than FLO — can certify individual farm businesses, not just cooperatives. Covers non-agricultural companies (processors, traders). Broader ingredient coverage. Well recognised in European natural cosmetics and specialty supplement supply chains.
- **Limitations & drawbacks:** Less consumer recognition than Fairtrade FLO. Negotiated rather than fixed premiums create variability. Smaller certified buyer network.
- **Best suited for:** Processors supplying European natural cosmetics, specialty supplement, or wellness brands that require a fair trade dimension but fall outside the cooperative/commodity scope of Fairtrade FLO.



Sedex / SMETA

Ethical trade audit — labour practices across global supply chains

- **Who it is for:** Processing facilities and suppliers to global brands, particularly relevant when supplying large UK, European, or US retail buyers.
- **What it covers:** SMETA (Sedex Members Ethical Trade Audit) covers four pillars: Labour (wages, hours, freedom of association); Health & Safety; Environment; and Business Ethics. 2-pillar (Labour + H&S) or 4-pillar audits available.
- **Certification costs:** SMETA audit: USD 500–3,000 per audit by an approved auditing company. Sedex platform membership: USD 150–500/year. Shared audit data reduces repeat auditing.
- **Where fees go:** Sedex (platform) and approved auditing companies. Sedex is a non-profit membership organisation.
- **Premium pricing reality:** Not a price premium driver. A baseline supplier qualification requirement for many UK and global retailers (Tesco, M&S, Boots, etc.).
- **Volume reality:** Commonly required by many large retail supply chains. Increasingly expected as standard by global brands, particularly UK and European retailers.
- **Tangible benefits:** Widely accepted by UK and global retailers. Shared audit model reduces auditing burden on suppliers (one SMETA audit, multiple buyers can access the report). Practical focus on labour conditions and safety.
- **Limitations & drawbacks:** Audit can become a checklist exercise without genuine relationship or improvement. Results can be 'managed' by well-prepared facilities. Does not address environmental or sustainability practices meaningfully in the 2-pillar version. Findings do not always lead to remediation.
- **Best suited for:** Processing facilities supplying UK and global retail brands with ethical trade audit requirements in their supplier qualification programmes.



SA8000

Social accountability standard for working conditions and labour rights

- **Who it is for:** Manufacturing and processing facilities with significant labour forces.
- **What it covers:** Nine elements: Child labour; Forced & compulsory labour; Health & Safety; Freedom of association; Discrimination; Disciplinary practices; Working hours; Remuneration; and Management systems.
- **Certification costs:** Certification audit: USD 3,000–10,000+ depending on facility size and country. Annual surveillance audits required.
- **Where fees go:** Accredited certification bodies. Social Accountability International (SAI) develops and maintains the standard.
- **Premium pricing reality:** Not a price premium driver. A supplier qualification requirement for brands with strong labour standards commitments.
- **Volume reality:** Required by some large brand buyers (gap, H&M in apparel; some food/supplement companies). Particularly relevant for large-scale ingredient processing facilities.
- **Tangible benefits:** One of the more rigorous social standards. Strong management system requirements mean it is more than a point-in-time audit. Respected by socially responsible procurement teams.
- **Limitations & drawbacks:** Resource-intensive. Less commonly required in smaller herbal ingredient supply chains than in apparel or electronics. Does not address environmental or sustainability practices.
- **Best suited for:** Large processing facilities with substantial labour forces supplying major global brands with explicit social accountability requirements.

SECTION FIVE

Other Relevant Standards & Certifications



Non-GMO Project Verified

Third-party verification that products are not genetically modified

- **Who it is for:** Processors and brands selling to US and Canadian natural markets.
- **What it covers:** Supply chain assessment verifying absence of GMO inputs. Testing requirements for high-risk crops. Annual verification.
- **Certification costs:** USD 500–5,000+ per product line depending on complexity. Non-GMO Project is a non-profit; accredited technical administrators conduct assessments.
- **Where fees go:** Non-GMO Project (standards and advocacy) and technical administrators (assessments).
- **Premium pricing reality:** Strong consumer recognition in the US. Non-GMO Verified is one of the most recognised food labels in the US. Premium value primarily at the retail product level; ingredient-level premium is more limited.
- **Volume reality:** Most herbal ingredients are non-GMO by nature. Certification verifies this formally for buyers who require documentation.
- **Tangible benefits:** Required by many US natural food and supplement brands. High consumer recognition. Third-party documentation of non-GMO status.
- **Limitations & drawbacks:** Most herbs are inherently non-GMO, the certification verifies what is already true. Cost can outweigh benefit for herbs with no GMO relatives in commercial use. Does not address any sustainability, social, or quality practices.
- **Best suited for:** Processors supplying US natural food and supplement brands with Non-GMO sourcing requirements.



ISO 17025

International standard for laboratory testing and calibration competence

- **Who it is for:** In-house or third-party testing laboratories involved in herb identity, purity, and contaminant testing.
- **What it covers:** Competence requirements for testing and calibration laboratories. This covers technical requirements (equipment, methods, staff), management system requirements, and impartiality. Accreditation demonstrates that test results are valid and reproducible.
- **Certification costs:** National accreditation body assessment: USD 3,000–20,000+ depending on scope and laboratory size. Ongoing annual surveillance fees.
- **Where fees go:** National accreditation bodies (ANAB in the US, UKAS in the UK, DAkkS in Germany, etc.).
- **Premium pricing reality:** Not a price premium driver. A quality infrastructure standard that supports confidence in testing data.
- **Volume reality:** Not volume-related. A credibility marker for lab results.
- **Tangible benefits:** Test results from ISO 17025-accredited labs are internationally recognised and accepted by regulatory authorities. Reduces buyer need for re-testing. Essential for generating results accepted in legal/regulatory contexts.
- **Limitations & drawbacks:** Accreditation is for the management system, not the specific test method — an accredited lab can still use an inappropriate test. Does not guarantee the right tests are being performed, only that the chosen tests are performed competently.
- **Best suited for:** Processors operating in-house labs or evaluating third-party testing labs. Results from accredited labs carry significantly more weight with regulators and international buyers.

Quick Reference

Use this table to quickly compare certifications across key dimensions relevant to primary processors.

Certification	Market Access	Annual Cost (USD)	Premium to Farm?	Covers Labour?	Covers Biodiversity?
USDA Organic	US	\$700–3,000	Market-driven	Minimal	Minimal
EU Organic	EU	€1,000–5,000	Market-driven	Minimal	Minimal
Fairtrade (FLO)	EU, US retail	\$2,000–6,000	✔ Mandated	✔ Yes	Basic
Fair for Life	EU, US	\$2,000–10,000	✔ Negotiated	✔ Yes	Basic
FairWild	EU, US	\$150–900*	✔ Mandated	✔ Yes	✔ Strong
UEBT	EU cosmetics/herb	€3,000–15,000+	No direct	✔ Yes	✔ Strong
Rainforest Alliance	EU, US	Varies	Inconsistent	Partial	✔ Yes
B Corp	All markets	\$1,000–50,000+	No direct	✔ Yes	Partial
ROC	Premium US/EU	\$400–10,000+*	Market-driven	✔ Yes	✔ Strong
GMP	US, EU, global	\$3,000–15,000	None	None	None
GACP	EU pharma	\$2,000–8,000	Some support	None	None
SMETA	UK/global retail	\$500–3,000	None	✔ Yes	Partial
ISO 14001	B2B	\$3,000–15,000+	None	None	Partial
Non-GMO Project	US natural	\$500–5,000	None	None	None

* FairWild: cost shown is the trader registration fee paid by processors to the FairWild Foundation — not the collection-side audit cost (USD 1,000–8,000). ROC: cost shown is the annual handler license fee (0.1% of gross revenue from ROC-claimed products; minimum USD 400; application fee USD 350–550 one-time). Processors register as licensed handlers and do not receive ROC certification.

CLOSING

Reference, AI Use Statement & Acknowledgements

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Meeting notes from SHI working groups were compiled and written up by Ann Armbrrecht, PhD, founder and director of the Sustainable Herbs Initiative, and Nikita Agarwal, PhD, member of the SHI Stewardship Council and Product Manager at [Herb Artizan](#). Both also served as editors throughout the toolkit. Bryce Youk assisted in the design and layout.

On the Use of AI Tools

AI was used as a practical writing and research aid in the development of this toolkit. Specifically:

- **ChatGPT and Claude** were used to help structure and synthesize notes from working group meetings, to compile background research for the certification section, and for basic design.
- **Perplexity** was used to cross-check information for accuracy.
- **Grok** provided additional quick-reference checks.

All AI-generated content was reviewed manually. The certification section in particular was carefully verified. Language was revised to remove any overstatements or inaccuracies.

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