Ethical sourcing in practice

Insights from BioInnovation Africa supply chain assessments

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UEBT SOURCING WITH RESPECT®

1 Strategic foundations: partnering for ecological and social impact

BioInnovation Africa (BIA), a project commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has supported biodiversity-based, African-European value chains for social-ecological change in partner countries.

The project focused on improvement of socio-economic working conditions, biodiversity conservation and sustainable use, and private sector investments. During the project, GIZ formed a partnership with international non-profit UEBT: Sourcing with respect. The partnership assisted local partners in improving ethical sourcing practices in biodiversity-based supply chains.

Selected supply chains were supported to respect the UNCTAD BioTrade Principles and Criteria. UEBT carried out field assessments in the value chains using the UEBT standard, prepared gap analyses against the BioTrade criteria and promoted action plans to make improvements. UEBT was positioned to carry out field assessments due to its long role in operationalising the UEBT standard, which is based on UNCTAD BioTrade Principles and Criteria.

The Standard is also aligned with international instruments such as the Convention on Biological Diversity (CBD), the Kunming-Montreal Global Biodiversity Framework (GBF) and the UN Sustainable Development Goals.

BioInnovation Africa supported African-European business partnerships for biodiversity-based value chains based on strong ethical, social, and environmental standards, including equitable benefit-sharing and the sustainable use of Africa's genetic resources. The overall project objective was to promote social-ecological change and reconcile environmental and socio-economic sustainability in biodiversity-rich areas for the benefit of all.

The BIA project supported its partners to make commitments to respect BioTrade principles and to undertake positive actions and/or concrete improvements to fulfil the criteria monitored in the field assessments. UEBT worked with stakeholders to tailor action plans to local contexts and focus on continual improvement.

Field assessments took place in the four implementation countries of the BIA project:

- Cameroon
- Madagascar
- Namibia
- South Africa

All BIA supported partners, representing a diverse set of biodiversity-based value chains, underwent an assessment. Assessments covered a wide range of social and ecological criteria, including conservation and sustainable use of biodiversity, respect for the rights of actors, local development, fair and equitable benefit sharing, and more.

This publication summarises the field assessments, observations and gaps found, and the promoted improvements. The document shows how BioTrade Principles can be applied in supply chains, and how the promotion of these practices can lead to meaningful change.

Cover: Centella picker, Madagascar

Page 3: Collected Centella, Madagascar

The BIA project assisted partners in adhering to BioTrade principles and taking positive actions to meet the evaluated criteria. Through customised action plans, UEBT's collaboration with stakeholders emphasised ongoing improvements.

2 Overview and methodology of field assessments

From 2020 to 2025, twenty-four field assessments were conducted, covering 11 biodiversity-based supply chains that had been selected based on criteria such as market potential, opportunity to support small-scale producers or Indigenous People and Local Communities (IPLCs), utilisation of associated traditional knowledge accessed from IPLCs, or sourcing taking place in areas of high biodiversity importance, among other criteria.

In total, 19 organisations in the sourcing areas were assessed across these countries, with follow-up assessments conducted for five of them across the two phases of the BIA project[1].

Figure 1 shows a summary of the countries, ingredients (natural raw or processed materials) and whether they are wild-collected (harvested from a natural habitat) or cultivated (farming or cultivated tree crops).

Field assessments took place during harvest or wild collection periods to allow for direct observation of practices and to carry out interviews with wild collectors (pickers) and farm/field workers.

They were carried out by independent and well-trained assessors, who brought sector-specific experience and contextual knowledge. The methodology was participatory, combining field observation, stakeholder discussions, document review, and confidential interviews with workers.

All assessments covered the full UEBT field checklist, covering all BioTrade Principles and Criteria. See highlights of the core 'minimum' and 'critical' requirements checked in Table 1. These indicators reflect core ethical and environmental expectations for biodiversity-based supply chains. Where they are not in place, they must be addressed with immediacy (for minimum requirements) or priority (for critical requirements, usually a maximum of one year to correct these gaps). These important requirements are also most relevant in the context of due diligence and risk management.

The collaboration on field assessments took a learning and improvement approach in working with BIA project partners. Both GIZ and UEBT shared the process with companies, to allow industry stakeholders to increase awareness of practices on the ground, see and identify gaps, and together (international and local processors, farmers and local producers, cooperatives, small and medium enterprises, etc.) explore practical actions and improvements.

(1) Phase 1: July 2019 to December 2022; Phase 2: January 2023 to April 2026

Table 1 | Principles and highlights of the expectations in the UEBT field checklist

Principles

Principle 1	Conservation of biodiversity
Principle 2	Sustainable use of biodiversity
Principle 3	Fair and equitable sharing of benefits derived from the use of biodiversity
Principle 4	Socio-economic sustainability
Principle 5	Compliance with national and international legislation
Principle 6	Respect for rights of actors involved in BioTrade activities
Principle 7	Clarity about land tenure, right of use and access to natural resources

Minimum requirements

- No deforestation or conversion of intact ecosystems
- Respect for CITES and protected species
- No collection in protected areas
- No human rights infringements
- No child labour
- Minimum wage respected

Critical requirements

- Biodiversity risks and information collected
- No invasive species or GMOs
- Sustainable cultivation and wild collection practices
- Soil and water management
- Agrochemical use and management
- Fair pricing based on cost calculations
- Inclusive and transparent contracting
- Quality and traceability
- Compliance with laws and international agreements
- Workers' rights (contracts, working hours, maternity protection, freedom of association and collective bargaining, etc.)
- Health and safety
- Land and community rights

Figure 1 | Number of field assessments carried out (over 5-year period)

C Cultivated W Wild collection

Madagascar assessments

1 Ginger C

2 Centella W

3 Ylang-ylang C

1 *Cinnamomum camphora* (Ravintsara) W

Cameroon assessments

1 Beeswax C

1 Mondia W

2 *Tetrapleura tetraptera* (Aidan Tree) W

Namibia assessments

3 Marula W

4 Devil's Claw C W

South Africa assessments

2 Marula W

2 Honeybush C W

1 Natural raw material *[confidential]* W

3 Key findings: good practices observed and gaps found

The full UEBT field checklist was used in the field assessments. Results below are described for the 'minimum' and 'critical' indicators.

Overall, the field assessments showed that:

Performance on 'minimum' indicators

- Across all four BIA focal countries, 13 partners (54%) showed full alignment with all six minimum indicators.
- Nine partners (37.5%) reached 80–83% alignment, while two partners (8.3%) scored lower (50–67%), indicating priority areas for improvement.

Performance on 'critical' indicators

- Alignment with critical indicators was more variable, ranging from 45% to 100%. Still, ten partners (41.7%) scored between 60% and 80%, and nine (37.5%) exceeded 80%.

In most cases, the challenges identified in minimum indicators concerned alignment with minimum wage requirements, specifically that wages of workers are paid at least in line with official minimum wage regulations or collective bargaining agreements. Another challenge found, although to a lesser extent was respect for CITES, specifically that the supply chain showed compliance with CITES and other regulations related to rare, threatened or endangered species.

The most frequent challenges identified in critical indicators concerned weak systems to manage occupational health and safety, and lack of a cost-calculation that could provide information on whether prices paid to producers of the natural raw materials cover, at a minimum, the costs of production – including labour, materials, overheads, margin, and the good practices related to conservation and sustainable use, and respect for human rights and good working conditions.

The key findings of the field assessments can be grouped into two pillars:

- **Respect for biodiversity**
- **Respect for people**

And four important issues:

- **Biodiversity conservation and restoration** – including the identification of biodiversity risks and implementation of measures to protect and restore natural areas.
- **Cultivation and wild collection practices for sustainable use of biodiversity** – ensuring cultivation and wild collection practices support species regeneration, soil health, and water management.
- **Human and workers' rights** – addressing working conditions, health and safety, transparency, and regulatory compliance.
- **Community well-being and local development** – supporting living wages and incomes, fair benefit sharing, respect for traditional knowledge, and inclusive community engagement.

Looking at the four issue areas, supply chains had better levels of performance in Cultivation and wild collection practices for sustainable use of biodiversity and Community well-being and local development. They had more challenges in Biodiversity conservation and restoration, and in Human and workers' rights.

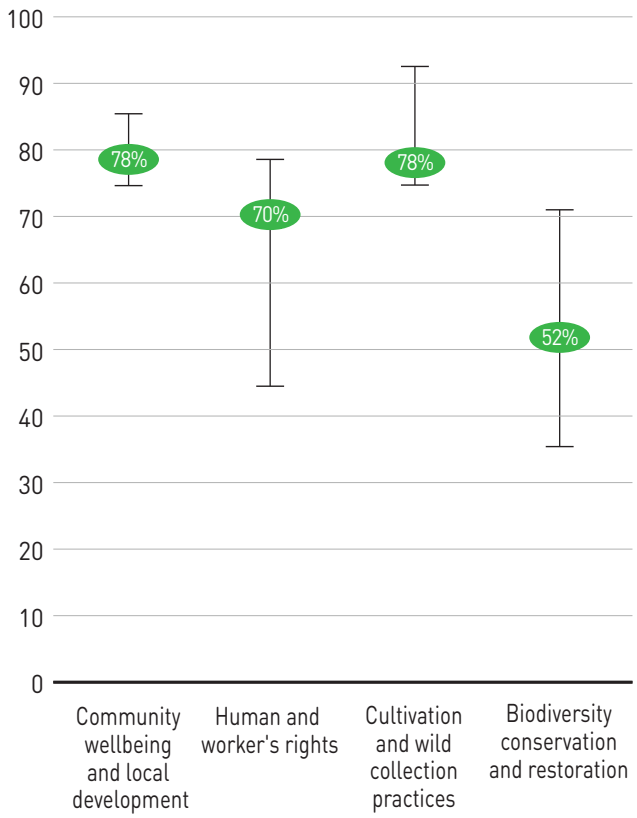
Table 2 and Figure 2 below summarise where the highest levels of alignment against the full set of indicators were observed, alongside the main good practices already in place and the recurring gaps identified across the four issue areas. Together, they illustrate both the strengths identified during field assessments and the areas for improvement.

Table 2 | Top issue areas alignment across the 24 field assessments

Pillar	Overall alignment against the full set of indicators	Good Practices Observed	Main Gaps Identified
Community well-being and local development	78%	Fair contracts; inclusive sourcing; local value addition; traceability systems	Wage calculations not systematic; limited community consultations; weak price review processes
Human and workers' rights	70%	No child labour; wages paid in line with minimum standards; contracts and unions	Absence of formal human rights policies; excessive working hours in some roles; weak health and safety systems
Cultivation and wild collection practices	78%	No invasive species/GMOs; soil and water practices; compliance with protected area rules	Limited monitoring of climate/ soil/water; weak pesticide risk management
Biodiversity conservation and restoration	52%	No conversion of intact ecosystems; protection of natural areas	Few biodiversity risk assessments; limited targets; weak monitoring

Figure 2 | Alignment with UEBT standard (%)

Average and range observed across assessments



[2] UEBT Risk Database: *Country risk scores – December 2024.*

Good practices in a high-risk context

It should be noted that all four of the BIA project implementation countries have high social and environmental risks. This means that, at the country level, when collecting credible public information, including national statistics, national regulations, and other reliable data sources, these four countries can be classified as high in terms of risks to people and biodiversity. However, this does not mean that the risks are specific to certain sectors or supply chains, and the information should not be interpreted in that way[2].

The general risk classification in the implementation countries as 'high' shows that, within a challenging context, many supply chains observed have positive practices in place, such as ecosystem protection, regulated working hours, respect of minimum wage requirements, and provision of drinking water. This shows that some of the assessed supply chains are identifying strategies to tackle risks that are otherwise common in their operating contexts.

4 Way forward: Actions and tools to improve

The field assessments gave BIA project partners, the industry stakeholders operating these biodiversity-based value chains, a better understanding of the ethical and ecological challenges on the ground. Each assessment concluded with a report detailing the findings, level of performance against the criteria, and tailored recommendations for relevant improvements and actions. Follow-up meetings were organised to present the results to the local and international supply chain actors, to discuss the findings, and prioritise next steps.

Based on this learning and improvement approach, partners were encouraged to focus on actions related to core expectations represented by the UEBT field checklist's minimum and critical indicators. GIZ supported this process by requesting structured 'management responses' that contained feedback from industry stakeholders on the findings and on how they would address them.

UEBT provided both individual support and online training, and disseminated practical tools and guidance to help industry stakeholders take action. These included:

- Biodiversity Action Plan trainings, manuals, case studies, and templates
- Cost and wage calculation tools
- Human Rights Due Diligence toolkit for local processing companies
- Guidance on the UEBT Standard – 'Zoom Into' Factsheets with Tips for Challenges
- Online training in the UEBT Learning Platform – structured online modules on key topics and challenges

Partners gave feedback on the guidance and tools provided that they were helpful not only to meet the expectations outlined in the field assessments, but also for future assessments against other international standards systems. The main tools disseminated are detailed in Table 3.

Table 3 | Tools used to promote social and ecological change

Tool	Description	Usefulness / Impact
Biodiversity Action Plans	Field-based tool to map biodiversity, identify threats, and define conservation actions. Often developed with local experts (e.g., botanical garden in Madagascar, university in Cameroon).	Helped structure biodiversity knowledge, guide field actions, and strengthen ecosystem protection.
Cost and Wage Calculation Tool	Excel-based template for calculating production costs and wage levels, comparing them to legal and living wage benchmarks.	Supported fair pricing and wage transparency; helped identify wage gaps and justify price increases.
Human Rights Due Diligence toolkit for local processing companies	Aligned with the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, the toolkit provides a step-by-step approach to developing and implementing due diligence systems.	Supported BIA partners in understanding and applying human rights due diligence; strengthened risk identification and management.
UEBT Standard – Factsheets and Guidance *Complemented by online training in the UEBT Learning Platform*	The UEBT Field Checklist includes practical implementation guidance for each indicator, supporting companies in translating requirements into action. Complemented by technical factsheets and training on biodiversity, human rights due diligence, living income/living wage.	Facilitated understanding of core indicators, guided field-level improvements, and supported alignment with sustainability standards.

5 Practical examples: Tangible social and ecological improvements

The field assessments carried out in the context of the BIA project led to tangible improvements in the biodiversity-based supply chains. In some cases, industry stakeholders acted quickly to correct specific issues, particularly those related to the minimum and critical indicators; in others, they initiated broader actions aimed at improving practices over time. In addition, many recommendations from field assessments have been included in the joint project between BIA and its industry partners.

The assessment findings and follow-up actions helped projects to have more structure in their long-term goals, and to have a specific technical support activities designed to bring about the improvements needed.

The examples below illustrate how BIA partners responded to field assessment findings, grouped by area of improvement.

Respect for biodiversity Improvement example

Some organisations developed and began implementing Biodiversity Action Plans to strengthen biodiversity management at source level. These plans were linked to Beeswax, Ginger, and Marula supply chains and covered sourcing areas and surrounding landscapes ranging from ≈100 hectares of smallholder plots to extensive communal forests (>20,000 hectares) and large landscapes (>13,000 km²).

They are serving as action-oriented roadmaps, identifying concrete measures to be carried out over time to address specific risks and promote long-term improvements. Implementation has already started and the defined actions share common priorities in biodiversity protection and sustainable use, including:

Biodiversity conservation and restoration

- Rehabilitate degraded biodiversity areas on farms or in wild collection areas.
- Organise awareness-raising sessions for farm workers and wild collectors about local biodiversity and how to conserve it.
- Plant areas that are prone to erosion with native species that also attract beneficial insects.
- Establish woodlots for firewood production and avoid cutting trees in forests.
- Contribute to clearing and controlling invasive species.

Cultivation and wild collection practices for sustainable use of biodiversity

- Pilot the use of machines that are more energy-efficient and have lower emissions, as well as low-emission energy sources.
- Reuse organic waste as compost and ensure proper management of non-organic waste (including wastewater).
- Apply natural soil management through crop rotation and experiment with regenerative practices such as integrating other crops and compost; build natural structures to reduce erosion.
- Follow integrated pest and waste management and risk mitigation measures when using agrochemicals.
- Follow guidelines for wild collection, including frequency of collection, harvest methods, and harvest rates, to ensure regeneration.
- Set up monitoring systems for changing climatic conditions and addressing their consequences.
- Install structures for collecting rainwater, test soil humidity, and monitor weather conditions to decide on irrigation; use efficient irrigation techniques.

Respect for people Improvement example

Human and workers' rights

Several partners acted to improve legal compliance and working conditions for their workforce:

- In Cameroon, two supply chains introduced written contracts to replace verbal agreements, ensuring clearer and more accessible terms for workers.
- In cases where gaps with wage levels were found, industry stakeholders took corrective measures to ensure alignment with legal standards. Salaries were renegotiated to meet national minimum wage thresholds, with implementation scheduled for the 2025 harvest.
- The introduction of salary registers, payslips, and more structured payroll documentation helped improve the traceability and transparency of salary payments in different contexts and ensure that workers are paid consistently and in line with agreed rates.
- In South Africa, one supply chain revised working hours, adjusted shifts, and hired two new staff members to comply with national labour regulations and reduce excessive workloads.

Occupational health and safety

This topic emerged as a shared priority across all contexts:

- Risk assessments were planned or initiated in Madagascar, South Africa and Cameroon.
- Supply chains established or upgraded first aid systems, including the appointment of health and safety officers and the distribution of first aid kits.
- PPE distribution was improved, and regular training cycles were planned.
- Emergency preparedness was strengthened through fire safety planning, equipment procurement, and evacuation procedures.
- In Madagascar and Cameroon, organisations began building or budgeting for sanitary facilities to meet worker hygiene needs.

Community well-being and local development

Traceability was widely recognised as a key sustainability element. Five supply chains launched or strengthened traceability systems in response to the BIA field assessments and others improved their quality policies and procedures.

- Improvements included the development of data collection tools, GPS mapping of collection areas, training of cooperative staff, and updates to internal procedures and manuals.
- In South Africa, a supply chain is finalising a comprehensive traceability and management system to improve tracking and quality control.

Stronger, more formal, and fair relationships with producers were also encouraged by the assessment process:

- Four partners demonstrated a clear commitment to using and periodically revising cost calculations to inform fair pricing. In one case, this led to a price increase for the natural raw material, recognising production costs and market dynamics.
- The same partner also improved producer engagement through seasonal meetings, regular technical field visits, and the appointment of a dedicated supervisor to liaise with producer associations.
- In Cameroon, a partner supplied germinated seedlings, organic fertiliser, and offered technical coaching to producers.
- In South Africa, one partner improved contracts with independent harvesting teams, strengthening commercial relationships and clarifying responsibilities.

Page 11: Traditional beehive, Cameroon

Page 12: Honeybush processing, South Africa

Page 13: Mondia in drying racks, Cameroon

Back cover: Ylang-ylang, Madagascar

Supply chains which were assessed twice during the two project phases, allowed stakeholders to compare the status quo over time and quantify improvements. One supply chain in Madagascar and another in Cameroon both enhanced their biodiversity practices (e.g., through implementation of a Biodiversity Action Plan and/or reforestation actions), updated cost calculations to ensure fair prices, formalised sourcing agreements, and strengthened communication and transparency with producers, including on pricing and payment terms.

The company in Madagascar also carried out a human rights risk analysis and reinforced grievance mechanisms.

These efforts in the supply chain in Madagascar and in the one in Cameroon resulted in overall alignment with the UEBT Standard improving significantly – from 84% to 99% and from 42% to 89% respectively. These cases illustrate the trajectory of improvement that can be achieved when partners follow up on assessment findings and implement the actions they have committed to.

The overall alignment with the UEBT Standard improved significantly, highlighting the impact of dedicated collaboration where partners follow up on assessment findings and implement their committed actions.

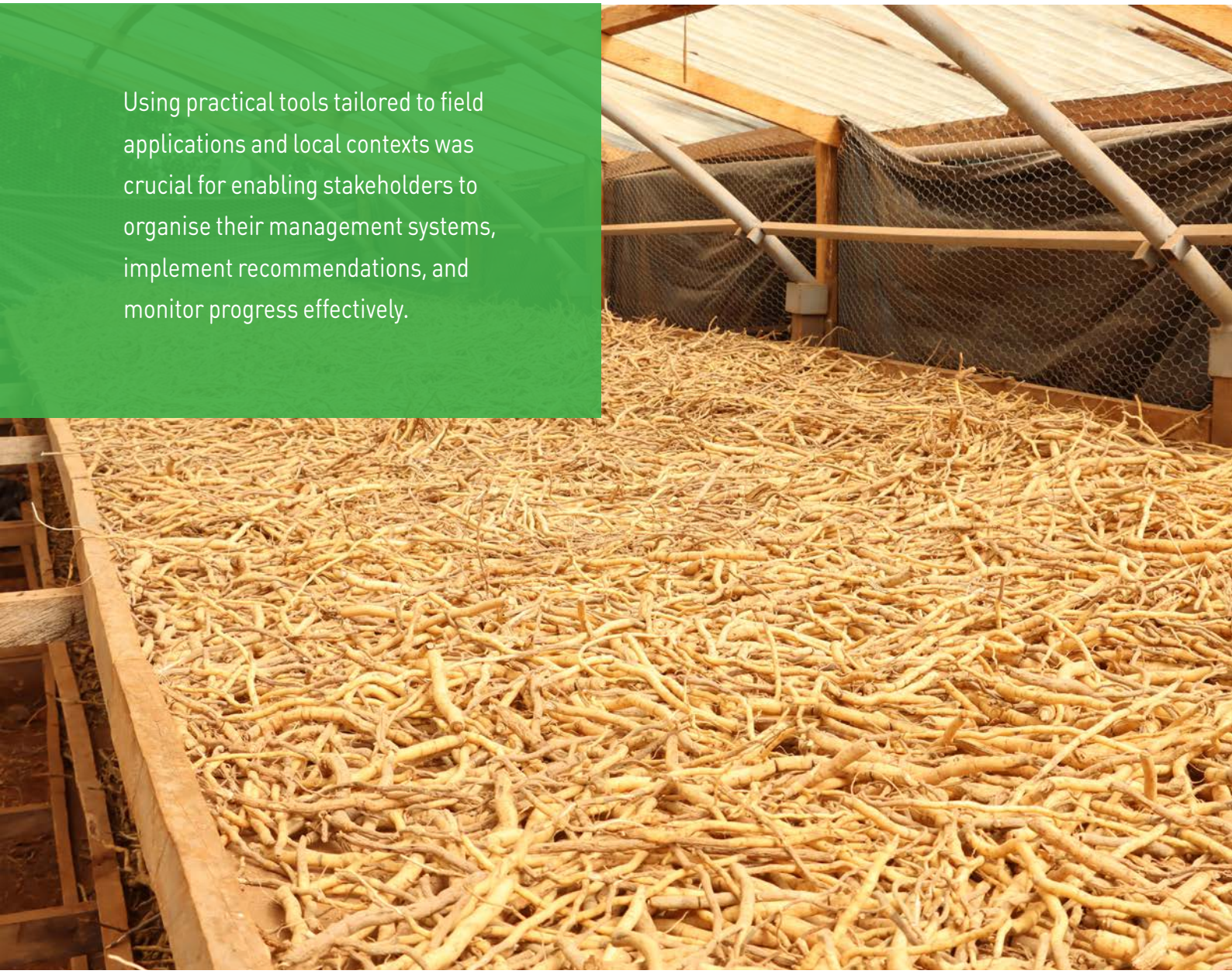
6 Lessons learned

The experience of conducting field assessments under the BIA project highlighted several lessons learned. The most important ones were:

- **A supportive, participatory approach drives meaningful purpose.** For assessments to be meaningful and effective, the approach must be both supportive and participatory. It should help local partners reflect on their practices, build awareness, and move forward without being overwhelmed by requirements. Introducing all indicators at once can discourage industry stakeholders. A learning and improvement approach structured around prioritising risks (including 'minimum' and 'critical' concepts of importance), proved more effective in fostering engagement and enabling steady progress.
- **Development cooperation creates space for realistic, targeted support.** Many local partners face financial and technical constraints in aligning their practices with BioTrade Principles and Criteria. Embedding the assessments within a development cooperation project made it possible not only to identify gaps, but also to design targeted support and project activities that responded to real needs.
- **Shared responsibility drives long-term improvements.** Where international industry stakeholders actively share responsibility and follow up with local industry stakeholders (producers, cooperatives, and small and medium enterprises), stronger and more sustained improvements have been observed.
- **Locally adapted, practical tools enable sustainable progress.** The use of practical tools – designed to be applied in the field and adapted to local realities – proved essential in helping stakeholders structure their management systems, translate recommendations into concrete actions, and monitor progress over time.
- **External assessments create a valuable starting point for long-term improvement.** For most organisations, the assessments served as an initial entry point to build understanding of key sustainability topics, as partners themselves reported. Even when not all issues could be addressed, the process helped define a clear roadmap for improvement. This roadmap can be followed beyond the project's duration, with UEBT or other groups providing technical support as needed.

- **Field assessments enhance collaboration and risk awareness.** Field assessments proved to be an important tool for the BIA project, as they provided a clear understanding of the status quo of supply chains and highlighted potential challenges to be addressed in the partnership projects. They also offered a practical way to evaluate companies' commitment to advancing socio-ecological change within the selected supply chains and reinforce the premises and conditions for collaboration.

Using practical tools tailored to field applications and local contexts was crucial for enabling stakeholders to organise their management systems, implement recommendations, and monitor progress effectively.



Design Alex Rhind for UEBT

URL links

Private Business Action for Biodiversity:
www.giz.de/en/worldwide/40693

Union for Ethical BioTrade:
www.uebt.org

UEBT Factsheet on Biodiversity Action Plans:
www.ethicalbiotrade.org/resource-pages/biodiversity-action-plans-factsheet

UEBT Guidance Manual on Biodiversity Action Plans:
www.ethicalbiotrade.org/resource-pages/uebt-bap-full-guidance

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