

Finance innovation in the biotrade

Mapping, analysing and advising on financial instruments for small biotrade businesses in Namibia and South Africa

Summary Report 2025











Copies of this document are available from:

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Introduction

This is a summary of a longer report available on the BioInnovation Africa resources page.

Executive Summary

The financial sector remains the catalyst of economic growth, and SMEs play a critical role in developing and emerging economies, significantly contributing to GDP and employment. They are key drivers of economic growth and job creation.

Yet SME biotrade businesses continue to face significant barriers in accessing appropriate finance. While many have outgrown microfinance schemes, they often fail to meet the eligibility criteria for grants, development or commercial lending, and private equity, leaving them excluded across the financial spectrum. Where financial support is available, it is incompatible with the modest scale, informal structures, and cash-flow constraints of SMEs. Financial institutions often perceive biotrade as too risky.

SMEs need finance to introduce new products to formal local and international markets; comply with food, cosmetic, and pharmaceutical regulations; and fulfil legal requirements including Access and Benefit-Sharing (ABS) regulations. The lack of longterm predictable funding undermines the biotrade sector's ability to grow. Bridging the financing gap will require targeted financial mechanisms, adapted eligibility frameworks, and support that aligns with the realities of biodiversity-based business models. In Namibia and South Africa, blended finance appears to be the most viable option to support biotrade SMEs. There is a need for a critical review of existing public financing, SME development strategies, regulatory bottlenecks and the operational realities faced by biodiversity-based enterprises.

Building capacity among financiers and leveraging the technical and financial resources of development agencies will be essential to unlock finance for biotrade SMEs and enhance their commercial viability. This report recommends the design and pilot of a blended finance mechanism for biotrade SMEs in Southern Africa. The aim is to design a sustainable country-specific blended finance framework that improves SME access to capital while creating a model that can be scaled and replicated in other developing countries.

Objectives of the study

- Review literature on financial mechanisms with specific reference to small and micro biotrade businesses in Namibia and South Africa.
- → Map the landscape of national, bilateral and international public and private funds and investment for the sector.
- Identify funding mechanism gaps in Namibia and South Africa for small biotrade businesses.
- Report on strengths and weaknesses of small and micro business access to funding.

Problem statement

Small and medium-sized enterprises (SMEs) operating in the biodiversity-based (biotrade) sector face persistent and systemic barriers in accessing appropriate financing, particularly those that fall into the so-called missing middle.

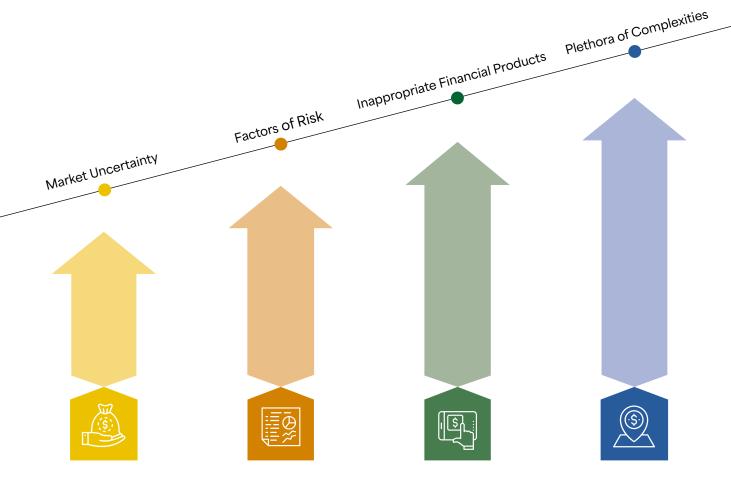
These are businesses that have outgrown microfinance schemes but are still considered too small, too risky, or too informal to qualify for traditional commercial lending or to attract private equity. Several critical financing challenges affect these SMEs:

→ Limited and sustainable financial flows:

There is a lack of long-term predictable funding streams to support biodiversity-based enterprises. Available financing is often tied to short-term donor cycles, project-based funding, or calls for proposals that do not match the business growth

- timelines of SMEs. This undermines the sector's ability to scale sustainably or invest in long-term value creation.
- → Limited financial flows to business support organisations (BSOs) with a mandate to develop the biotrade sector: BSOs and intermediary institutions such as incubators, cooperatives, and technical support agencies are critical for building SME capacity and facilitating access to markets and compliance. However, these organisations are chronically underfunded, limiting their reach, service quality and ability to tailor support to the biotrade sector.
- → Scarcity and misalignment of biotradespecific funds: Dedicated financial instruments for the biotrade sector are rare, and when they do exist are often geared towards large corporates, intermediaries, or conservation projects rather than directly supporting SMEs. Where support is available, the minimum ticket sizes, collateral requirements or investment terms are frequently incompatible with the modest scale, informal structures and cash-flow constraints of SMEs.
- The sector requires a wide variety of interventions and support in areas including biodiversity conservation, training and capacity development, supply chain development, innovation, market access, business and investment readiness and financial assistance.
- When there is funding available to the biotrade sector, the private sector (including cooperatives, start-ups and emerging SMEs) complains about inappropriate eligibility criteria.

Recurring funding challenges experienced by small biotrade businesses



High degree of innovation in biotrade does not translate into immediate market uptake.

Perceived high risk by lenders & lack of acceptable collateral with traceable credit history leads to high transaction costs, if financial products are available. The lack of tailored products means MSMEs may not find appropriate financing options that align with their business cycles, cash flow patterns, or investment needs. Regulatory & policy barriers Complex loan/grant processes Limited financial literacy & business skills etc.

Source: Dagmar Honsbein

What are the specific financing needs of SMEs in biotrade?

It can cost between €10,000 and €100,000 or more and take two to four years to introduce a cosmetics product based on indigenous natural resources to European or US markets.

Food, beverages, dietary supplements, and medicines are even more expensive and time-consuming, often requiring eight or more years from ingredient discovery to product launch.

Biotrade SMEs, which often supply raw materials (genetic resources) or ingredients, and do primary processing, face substantial burdens in meeting regulatory and market requirements across the value chain. Beyond typical operating and asset financing, they require substantial sector-specific funding to comply with food, cosmetic, and pharmaceutical regulations.

The most difficult hurdle is fulfilling legal requirements for Access and Benefit-Sharing (ABS) under national and international laws and ensuring fair sharing of benefits with local communities or indigenous knowledge holders. This comes with monetary and non-monetary benefit sharing mechanisms to be exchanged between user (most often the local SME) and the resource providers (e.g. indigenous people and local communities).

This process often entails creating new supply chains, entering new markets, and building awareness, all of which usually lie outside conventional financing options. While standard or conventional finance instruments exist, their terms and risk models rarely suit biotrade SMEs, which often operate in niche and unfamiliar markets.

Investors and lenders generally avoid these risks due to limited data, making financing especially difficult despite strong business cases.

Who is funding biotrade SMEs and what type of financing mechanisms do they deploy?

Despite their crucial role in biodiversity conservation and rural livelihoods, SMEs in the biotrade sector remain underserved by conventional financial systems. Bridging this financing gap will require targeted financial mechanisms, adapted eligibility frameworks, and a more holistic ecosystem of support that aligns with the realities of biodiversity-based business models.

Innovative mechanisms like guarantee schemes, fintech platforms, and value/supply chain financing are largely absent, despite their potential to reduce risk, improve access, and tailor support to business cycles. Their underutilisation leaves a critical gap in derisking investment and scaling inclusive finance in the biotrade sector.

Most assistance to SMEs across Southern Africa has been from public development agencies (e.g. GIZ, the ABS Initiative, the ABioSA project, UK's FDCO, USAID, UNDP BIOFIN, UNDP GEF 6, UNCTAD BioTrade Initiative), and focused on capacity building, trade facilitation, certification and market/investment readiness.

National support, particularly in Namibia and South Africa, is often small-scale, uncoordinated across government or public institutions, and not biotrade-specific.

Funding, including microcredit personal loans, tends to be one-off, fragmented and limited (starting from some €2,500 and most often only up to €5,000).

South Africa's public support is more structured, led by government departments, like the Department of Trade, Industry and Competition (DTIC), Department of Science and Innovation (DSI), and Department of Forestry,

Fisheries and the Environment (DFFE) under the BioPANZA network. BioPANZA has clusters to coordinate policy, innovation, finance, sustainable supply, and market access. The BioPANZA finance cluster, with the Industrial Development Corporation, is piloting the Natural and Indigenous Products Programme (NIPP) Fund.

The fund is designed to support biodiversitybased businesses involved in the development, processing, and commercialisation of natural and indigenous products.

It is in its early implementation phase, with pilot funding of approximately 20 million Rand. It aims to address barriers in access to finance by offering a mix of concessionary loans and grants. The fund prioritises projects that contribute to transformation, inclusive growth, benefit-sharing with communities, and sustainable resource use.

The NIPP Fund is expected to be expanded based on pilot outcomes, with potential financing partnerships from government and private sector funds supporting SMEs.

In parallel, some private sector actors and civil society initiatives (e.g. Sparkassenstiftung, Givaudan Foundation, L'Oréal, Julius Baer Foundation) support supplier communities through social projects and trade facilitation and trade finance.

Retail chains like Shoprite, Spar, Food Lovers, DisChem and Clicks offer market access, local sourcing and financing options such as contract-based finance and invoice prepayments to biotrade companies with indigenous natural products. SMEs mostly receive technical assistance rather than substantial financial backing and dedicated long-term financing options for biotrade SMEs remain insufficient.

Biotrade adjacent sectors have successfully positioned themselves by showcasing align-

ment with the SDGs and UNFCCC objectives, which helped them unlock support from development cooperation, development finance institutions (DFIs), and impact investors, including institutions like KfW, AFD and FFEM. In these cases, biotrade was often linked to commodity value chains such as shea butter, coffee, cocoa, and palm oil. Therefore, innovative financing mechanisms in adjacent sectors, such as impact investing, that align closely with the objectives of biotrade are available. Impact investors are typically drawn to areas that deliver measurable benefits in biodiversity conservation, fair trade, job creation, social equity, and eco-friendly products, all of which are outcomes the biotrade sector can credibly offer. To attract such investment, it is crucial for the biotrade sector to clearly demonstrate its contributions to the goals of the Convention on Biological Diversity (CBD), the Nagoya Protocol, and more recently, the Kunming-Montreal Global Biodiversity Framework (KMGBF).

Critical analysis of biotrade SMEs

SMEs play a critical role in developing and emerging economies, significantly contributing to GDP and employment. They are key drivers of economic growth and job creation, whether formal or informal. The supply of raw materials and ingredients is primarily driven by entrepreneurs, SMEs and community-based organisations including cooperatives established by Indigenous Peoples and Local Communities (IPLCs). Increasingly, both emerging and established farmers are becoming involved in biotrade.

Many of these actors originate from rural areas. Communities are seeking to formalise their biotrade-related business ideas to become eligible for support and investment. National legislation recognises cooperative

structures as the most appropriate legal form to achieve this, as they promote equality, transparency, product traceability, and business formality.

The establishment of cooperatives in Namibia and South Africa is guided by legislation and they are not incorporated under the legal provisions of the Companies Act. Despite being legally recognised, these community structures therefore rarely qualify as credible commercial entities in the eyes of financial intermediaries, which limits their access to finance.

As biotrade SMEs grow and increase their addition of value to genetic resources, they

face greater complexity, rising compliance costs, and a need for larger financial investments – yet suitable financial mechanisms remain limited.

Extensive analyses confirm that biotrade SMEs serve as vital contributors to socio-economic well-being and environmental sustainability.

Biotrade SMEs are key to rural economic development, responsible sourcing, biodiversity conservation and knowledge sharing. Strengthening support for these enterprises is essential to unlocking their potential as engines of sustainable and inclusive growth.

Biotrade SME strengths and opportunities



Sustainability Conservation / protection of biodiversity



Rural Development

Fosters job & livelihood creation and partnerships



Innovation

Sustainable use of resources and innovation strengthen the sector



Global Sustainability Goals

Alignment to SDGs & GBF



Green Finance Options

Present option for sustainable funds with appropriate M&E, Reporting



Market Demand

Increasing demand for sustainably sourced, traceable products

Source: Dagmar Honsbein

Summary of findings

Global biodiversity finance is diverse, evolving and well-developed for some sectors adjacent to biotrade.

Significant progress has been made since the Convention on Biological Diversity (CBD) came into force, but substantial gaps persist, particularly for biotrade SMEs.

Biotrade SMEs face structural financing gaps that are more severe than those in other sectors. While all small businesses grapple with challenges like access to working capital or asset-backed finance, biotrade enterprises must additionally navigate complex regulatory, scientific, and market-entry hurdles unique to biodiversity-based innovation.

These challenges, such as commercialising novel products from indigenous plants or complying with international standards, carry high upfront costs and long lead times before revenue generation.

Yet, current funding streams remain small-scale, fragmented and insufficient to address the depth and scale of these issues. This is precisely why a dedicated blended finance approach in Namibia and South Africa appears to be the most viable option. A blended finance approach should optimally combine concessional, public, and private capital to unlock the sector's potential for biodiversity conservation, rural livelihoods, and green growth.

Financial actors mostly use terms like sustainable finance, nature-based solutions, or corporate social responsibility/investment (CSR/CSI) to do good in the indigenous natural products sector. Such support options rarely become embedded as biotrade financing options, and thus do not seem to recognise biodiversity-based businesses as investable social enterprises.

Persistent gaps between SMEs' financing needs and financiers' products include limited working capital support, stringent eligibility criteria, and a focus on short-term, high-return investments.

SMEs require affordable rates, flexible terms, risk-sharing tools, and support to meet compliance, market access, and innovation goals. However, financial institutions often perceive biotrade as too risky and offer few alternatives or adapted finance options.

These mismatches are compounded by inconsistent terminology around biodiversity finance, making the sector difficult to describe and support in financial market terms.

There is a need for deeper policy and practical analysis, including a critical review of existing public financing frameworks, SME development strategies, regulatory bottlenecks, and the operational realities faced by biodiversity-based enterprises.

Policy analysis and relevant implementation mechanisms must be coupled with targeted stakeholder engagement and the design of tailored financial products that reflect the unique characteristics of the biotrade sector.

Stakeholders in the industry note that funding tends to follow clearly-presented opportunities. One reason for the limited financing in the biotrade sector may be its emerging nature and the current lack of well-articulated investment cases.

This underscores the importance of ongoing efforts to map and categorise biotrade SMEs in southern Africa and to build visible investment pipelines, alongside supporting the development of structured delivery platforms (SDPs) to enhance sector readiness for investment.

Building capacity among financiers, developing context-specific guidance frameworks, and leveraging the technical and financial resources of development agencies will be essential to unlock appropriate finance for biowterm commercial viability.

Blended finance ecosystem

- Contribute technical assistance, grants, and capacitybuilding support.
- Work on the ground

 hand in hand with the MSMEs.
- Ensure the maintenance of ESG compliance.

Development Organisations and NGOs

Government Agencies

- Establish favourable policies and regulations, creating an enabling environment for investment.
- Tax incentives, subsidies, and legal reforms help de-risk investments and support sector development.
- Provide financing and guarantees, often offering concessional loans, risk-sharing mechanisms, or credit enhancements to attract private investors.
- DFIs, a crucial role by offering patient capital.

Banks and DFIs

Funds and Private Investors

- Bring capital, seeking returns while being drawn to sectors with high impact potential
- These funds benefit from reduced risks due to support from public and development actors.

Source: Adrie El Mohamadi

Recommendations - seeking a new collaborative approach

Data gathered and analyses conducted through the study during 2023-2024 should inform the design and pilot of a blended finance mechanism for biotrade SMEs.

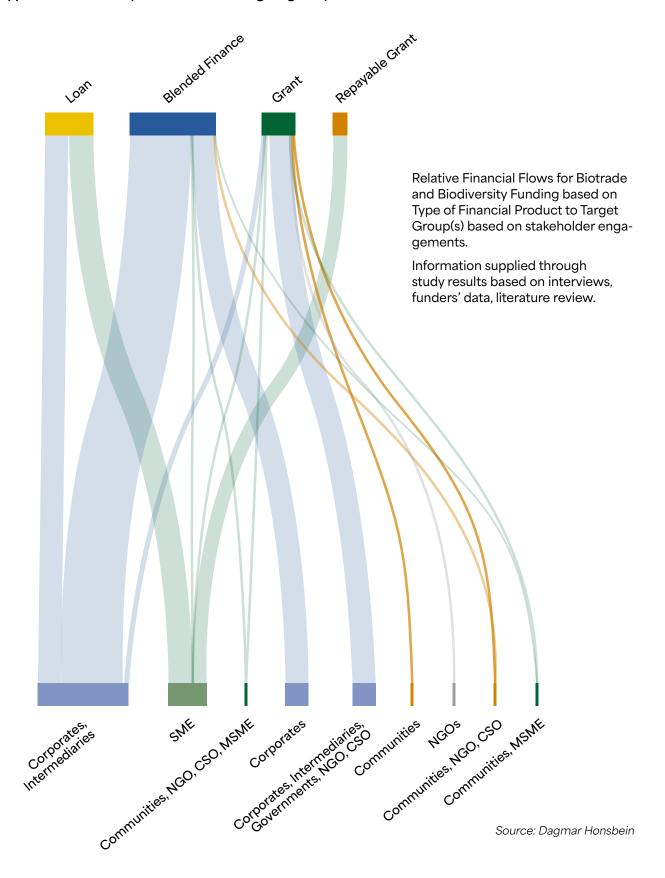
Institutions involved in development and environmental finance - such as national governments, development finance institutions and impact investors should lead a practical collaborative initiative with support focused on scalability, replicability, feasibility and sustainability of SMEs in biotrade. Clearly defined milestones will help ensure that the pilot can be adopted and adapted across different support interventions.

Key planned outcomes should include:

- → Building blocks for a viable blended finance ecosystem tailored to each country
- Clear data on SME investment needs and sector-wide financing opportunities
- → Investment-readiness reports for SMEs and cooperatives
- Defined roles and requirements for supporting a blended finance environment
- → National and regional dialogues to support sector development
- → Documentation of lessons learned and recommendations for scaling
- → A co-created strategy to enhance financial instruments and capacity-building
- → Guidelines for SMEs on presenting viable business proposals
- → Tailored due diligence criteria for financiers and SMEs - tested and refined

The overall aim is to design a sustainable, country-specific blended finance framework that improves SME access to capital while creating a model that can be scaled and replicated in other African or developing countries.

Relative financial flows for biotrade funding showing type of financial product and target groups





African-European partnerships for biodiversity conservation