Briefing

Forests; Drylands and pastoralism

Key findings and recommendations from IIED research and action for donors, governments, and forest and farm producer groups

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How green value chains can help restore Africa's drylands

Africa's drylands are degrading at a critical pace: but restoring them cannot rely on grants alone. The Dryland Sustainable Landscapes Impact Programme (DSL-IP) is testing whether green value chains — selling sustainably harvested or cultivated natural products — can make restoration pay and attract private investment. Drawing on lessons from Botswana, Malawi, Namibia, Tanzania and Zimbabwe, this briefing demonstrates how green value chains organised by legally recognised, well-governed forest and farm producer groups (FFPOs) can turn drylands restoration from a cost into a source of income.

Key points

Strong forest and farm producer organisations (FFPOs) are the foundation of drylands restoration. Governments should make legal registration easier and work with apex federations that represent multiple local organisations.

Multiple green value chains can incentivise dryland restoration, but the right chain can be country-specific, such as honey in Malawi, devil's claw in Namibia or baobab in Zimbabwe.

Common elements of successful FFPO enterprises include business planning, quality standards, training-of-trainers networks, matchmaking events and profit sharing. These approaches can be shared between countries.

Weak commercial capability is a bottleneck to scale. Funders should back multi-year business incubation, aggregation centres, working capital and quality certification to meet buyer requirements.

Why green value chains matter

As the 2030 deadline to halt land degradation nears, Africa's drylands are still fast degrading due to drought, wildfire, overgrazing and unsustainable harvesting.[1–4] This includes the miombo woodlands spanning over 3.6 million square kilometres across 10 southern African countries.[5] Falling yields can force smallholders to migrate as livelihoods collapse.

Drylands restoration is essential; but to work, it must pay. Green value chains offer a viable route, turning dryland restoration from a cost into a source of income for smallholders from products such as honey, baobab and devil's claw. Green value chains incentivise farmers to protect the trees, soils and wild plants they depend on, while diverse and dependable markets encourage sustainable production.

As international aid falls, focus is shifting to private investment in green value chains from sustainably harvested or grown forest and farm products.[6,7] The Dryland Sustainable Landscapes Impact Programme (DSL-IP) is testing this approach in 11 countries, where the Forest and Farm Facility (FFF) is helping forest and farm producer organisations (FFPOs) build viable businesses around green value chains (see also Box 1).

About the case studies

In 2025–2026, as part of DSL-IP, IIED staff and national business incubation experts documented five FFPO business models in Botswana, Malawi, Namibia, Tanzania and Zimbabwe. They assessed governance, land use, markets, finance, innovations and challenges, enabling cross-country comparison and learning. The five FFPOs differ in size, legal form and product, but each links income to land restoration (Table 1).[8–12]

Box 1. Jargon buster

Aggregation: pooling small individual harvests into larger lots that buyers are more likely to take.

Apex body: an umbrella group that speaks for local producer-group members nationally.

Forest and farm producer organisations (FFPOs): cooperatives, clubs or similar groups of producers that sell at least one product collectively (aggregation).

Green value chain: the steps from growing and harvesting a forest or farm product to selling it, and adding value while ensuring the land stays healthy.

Green value chains can reach people who are often left out of commercial agriculture — but only if they are designed to

What drives success?

From the case studies, one key lesson for policymakers and programmes is that strong internal governance drives successful FFPO enterprises. Helping FFPOs to achieve this requires investment alongside support for legal registration.

Legal status shapes what FFPOs can do: as Malawi's Zokoma Beekeeping Club was unable to sign contracts, own equipment or seek certification, it is becoming a cooperative. Tanzania's beekeepers lost national certification after re-registering as a cooperative and must reapply, showing that legal changes carry costs. Some legal forms can also constrain growth. When Zimbabwe's BaoMix first registered as a private business, it was limited to 20 shareholders.

Formal organisation unlocks investment — and apex bodies extend these benefits. Botswana's Gulugwe 34 cooperative secured 3 million pula (roughly US$220,000) to protect 590 hectares from elephants. As a registered trust, the Namibian exporter association has engaged with government and buyers collectively. Tanzania's Mlele cooperative supports 37 groups by brokering permits, negotiating bulk purchases with Upendo Honey and seeking a bank loan to pay members on delivery. Membership more than doubled after these services began.

Governance is equally important. The case-study FFPOs that performed best have built accountability, transparency and trust into how they work. For example, in Namibia, traditional authorities supervise harvesting in communal areas under resource management plans, with community monitors checking compliance. Clear benefit-sharing helps too: BaoMix and the Namibian exporters pay their members advances, then settle after sales.

Table 1. The five case studies at a glance

Country	Organisation	Product and system	Members	What changed	How it supports restoration
Malawi 	Zokoma Beekeeping Club, Ntcheu	Honey from a protected miombo plot (apisilviculture)	20 members; still an unregistered club	Harvests have grown from 17kg (2011) to 420kg (2025); honey sells at about US$10/kg	Bees deter loggers and charcoal burners; firebreaks and natural regeneration turned a degraded plot into dense forest
Tanzania 	Mlele Beekeepers Cooperative Society, Katavi	Honey and beeswax from miombo woodland	632 members in 37 groups (up from 273 in 14 groups before re-registering as a cooperative in 2024)	Access to a government processing hub; honey prices up about 20%	Modern hives replace bark hives that kill trees; fire-free harvesting; villages set aside forest reserves
Namibia 	Namibian Devil's Claw Exporters Association Trust (NDCEAT)*	Wild-harvested devil's claw root for European markets	NDCEAT works with 3,500+ harvesters, about 70% women	550–700 tonnes exported a year; harvester incomes up 25–40%	Local GACP+** harvesting standard; over 350,000ha under managed harvesting; regrowth of 70–85% in monitored plots
Zimbabwe 	BaoMix, Chimanimani	Baobab powder, oil and frozen drinks (freezits)	12 FFPO suppliers (down from 30), reaching about 3,600 households; 99% of founding members are women	Processing hub adds value; 20–30% advance payment on delivery	Harvesting rules leave fruit for regeneration; bylaws regulate tree cutting
Botswana 	Gulugwe 34 Cooperative, Tutume	*Lablab purpureus*, pearl millet and other drought-tolerant crops with livestock	34 members (23 women), down from 42; 590ha inside a cluster fence	Registered in 2023; first collective plots planted 2025/26	Elephant-proof fence secures farms; rotation, intercropping and legumes rebuild soils

* NDCEAT is a national organisation.
** Good Agricultural and Collection Practices Plus (GACP+) is a specific standard for the fair and sustainable biotrade of devil's claw in Namibia.

Key lessons for producers

Five key tactics for success

Not every product value chain fits every country — but the same successful business development tactics can be packaged and shared between countries (see Figure 1). Taken together, these approaches form a common framework for green value chain deals. These approaches are business planning and incubation; shared quality and traceability standards; training of trainers and peer learning; matchmaking with buyers and investors; and payment rules that reward loyalty.

Four key bottlenecks

The case studies also show that the biggest barrier to scale for FFPOs is their commercial capability: running a business that buyers and investors can trust. The most successful groups — Namibia's exporters, Tanzania's cooperative and BaoMix — have been supported by government, donors or private partners over several years. Four key gaps stand out, and overcoming them takes sustained support.

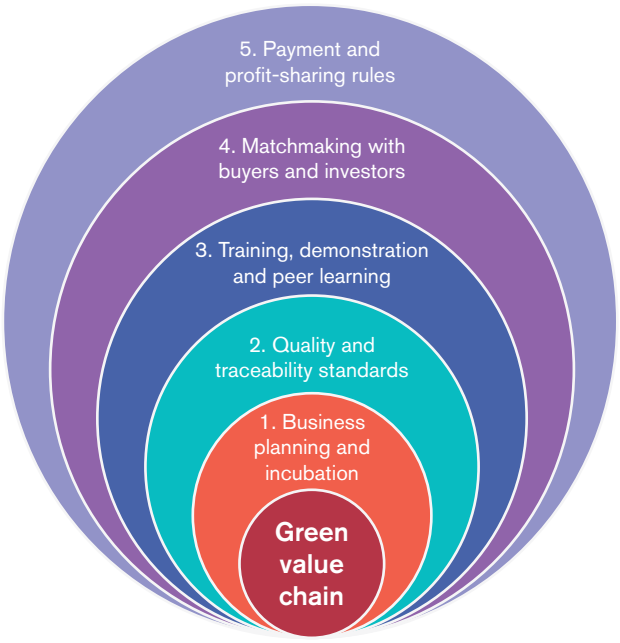
- **Aggregation:** without aggregation, groups cannot meet the volumes buyers need — and most produce is still sold individually. In Tanzania, beekeepers estimate that only 10% of bee products are sold collectively; the rest is sold to traders as unfiltered honey.
- **Working capital:** producers are often paid only after the final product is sold, so many sell elsewhere for quick cash. Namibia's harvesters receive nothing if sales fall through. And where credit exists, interest rates are often too high for smallholders. In Zimbabwe, BaoMix now pays 20–30% upfront to keep its suppliers while Tanzania's cooperative is seeking a bank loan to pay members on delivery.
- **Quality, certification and volume:** premium markets demand certification, which is costly and slow. For example, Namibia has no national organic certification body, so exporters depend on expensive external audits. Zokoma can sell honey to regional export markets that pay a 35% premium — but only once it has the required volume, hence plans for 200 new hives.
- **Unused value:** FFPOs often lose out by not adding value to their products. For example, Zokoma discards its beeswax for lack of processing skills, while Tanzanian beekeeper groups lack the equipment to produce high-value products such as royal jelly and propolis.

Who benefits?

Green value chains can reach people who are often left out of commercial agriculture — but only if they are designed to:

- **Women in green value chains:** about 70% of Namibia's devil's claw harvesters are women, and GACP+ explicitly promotes their fair participation. Women made up 99% of

Figure 1. Five tactics that make green value chains work (seen in all five DSL-IP case studies)



1 Business planning and incubation
In Zimbabwe, a DSL-IP green value chain expert helped BaoMix write its first business plan. In Tanzania, incubation taught members to process, package and sell directly rather than in bulk to traders.

2 Quality and traceability standards
Namibia's GACP+ standard, Tanzania's honey traceability system and BaoMix's sorting and sieving rules give buyers confidence in quality and origin.

3 Training of trainers, demonstration sites, peer learning
Namibia trains local facilitators who now lead harvesting and monitoring. Tanzania's hub-and-spoke model uses model farmers and demonstration apiaries. Botswana's farmer field schools show that sustainable practice pays first.

4 Matchmaking with buyers and investors
BaoMix met financial institutions, input suppliers and buyers at the November 2024 DSL-IP symposium. Enterprise profiling, investor mapping, pitch clinics and follow-up support turn contacts into deals.

5 Payment and profit-sharing rules that reward loyalty
BaoMix and the Namibian exporters pay part of the price on delivery. Zokoma pays dividends as farm inputs, linking forest income to household food security.

Sources: DSL-IP case studies (2026)[8–12]; Macqueen and Mwamba (2025)[7]

BaoMix's founding member groups, and 23 of Gulugwe 34's 34 members. Yet women's majority membership does not guarantee equal control of decisions or income. Malawi and Tanzania did not disaggregate membership by gender — a gap future monitoring should close.

- **Incomes support families and food security:** in Zimbabwe, women's baobab income pays for school fees, food staples and farm inputs. Zokoma's model uses honey profits to buy maize fertiliser for its members. These links matter in drylands, where a single failed season can push households into crisis.
- **Communities share wider gains:** in Namibia, devil's claw income supports school upgrades, borehole repairs and youth programmes.
- **Benefits can also be fragile:** Drought is already reducing nectar flows in Malawi. In Zimbabwe, unregulated stripping of baobab bark for handicrafts threatens the supply on which BaoMix's suppliers depend. Benefit-sharing rules and resource management plans must protect the poorest harvesters, not only the organised ones.

Recommendations

Green value chains can drive restoration at scale. But funders must invest patiently in well-governed, legally recognised producer organisations. The following recommendations are for donors, ministries (forestry, agriculture, cooperatives and trade) and partners deciding where to direct limited funds.

National governments

- Simplify and lower registration costs for producer organisations, and offer legal forms that can grow without losing member ownership.
- Transfer quality certifications when a group changes its legal status, and support national certification bodies so producers are not reliant on costly foreign audits.
- Harmonise rules on non-timber forest products so community enterprises can obtain permits quickly, while regulating harmful harvesting practices.
- Secure tree and land rights for communities, so that those who restore resources can benefit from them.

Development partners and funders

- Fund multi-year business incubation, not one-off training, and include aggregation centres, storage and processing in grant packages.
- Back blended finance, guarantee schemes and low-interest credit lines that let producer organisations pay members on delivery.
- Require gender-disaggregated data in green value chain monitoring.

Buyers and investors

- Offer advance payments and multi-year offtake agreements to producer organisations that meet agreed standards.
- Co-invest with public funders in quality systems and certification, and recognise credible local standards such as Namibia's GACP+.

DSL-IP and FFF partners

- Through regional exchanges, codify and share the business development toolkit — including business planning templates, quality and traceability systems, training-of-trainers and matchmaking guidance — for national teams to adapt.
- Support apex organisations that can aggregate across many small groups, as in Tanzania and Namibia.

Conclusion

To move from promising pilots to landscape-scale change, investments must flow into helping strong producer organisations develop their commercial capability — but it must flow now, while there is still time to meet the 2030 land degradation neutrality target.

Stephen Mwangi

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Notes

[1] Established under the United Nations Sustainable Development Goal 15, Target 15.3 aims to end desertification and restore degraded land by 2030. / [2] Blicharska, M, Haddad, F, Riccardi, T and Smithers, RJ (2025) Global presumed drylands: drivers, pressures, state, impacts, responses. *Journal of Environmental Planning and Management* 68(14), pages 3,411–3,438. / [3] Lewin, A, Murali, G, Rachmilevitch, S and Roll, U (2024) Global evaluation of current and future threats to drylands and their vertebrate biodiversity. *Nature Ecology & Evolution* 8(8), page 1,448–1,458. / [4] FAO (2019) Trees, forests and land use in drylands: the first global assessment. / [5] Jew, EKK, Dougill, AJ, Sallu, SM, O'Connell, J and Benton, TG (2016) Miombo woodland under threat: consequences for tree diversity and carbon storage. *Forest Ecology and Management* 361, pp.144–153. / [6] OECD (2026) A historic decline in foreign aid: preliminary 2025 ODA data. / [7] Macqueen, D and Mwamba, C (2025) Upscaling private sector dryland investment through matchmaking. IIED, London. www.iied.org/22687iied / [8] Kijazi, MH (forthcoming) Green value chains innovation case study for the Dryland Sustainable Landscapes Impact Programme: Mlele Beekeepers Cooperative Society, Tanzania. IIED, London. / [9] Mwangi, S (forthcoming) Innovative technologies case study: the case of Bao-Mix in Chimanimani District, Zimbabwe. IIED, London. / [10] Bickson, G (forthcoming) Zokoma Beekeeping Club: sustainable apiculture, Malawi. IIED, London. / [11] Gulugwe, KOO (forthcoming) 34 Cooperative: advancing green value chains and sustainable land management in dryland landscapes, Botswana. IIED, London. / [12] Johannes, MT (forthcoming) Namibia Devil's Claw Exporters Association Trust (NDCEAT): strengthening sustainable wild harvesting and green value chains in dryland landscapes. IIED, London.

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