

Investment factsheet:

Enhancing honey and other bee products in Sumbawanga

Tanzania is the **second-largest honey producer** in Africa, highlighting the sector's potential to enhance livelihoods through employment, income generation, and ecosystem sustainability. Around 90% of beekeeping in Tanzania is forest-based, with the sector contributing approximately US\$19 million annually to the national economy and employing about two million people. Despite the high potential for producing organic honey and beeswax, several challenges hinder its development in Sumbawanga, particularly: lack of modern equipment, limited access to capital, poor market access and knowledge and training gaps.

Problem statement

99% of beekeepers in Sumbawanga still use **traditional methods**, leading to low productivity, poor quality, and environmental harm. Adoption of modern beekeeping technologies, such as improved hives, is limited by high costs and lack of knowledge.

Proposed action

Strengthen the honey industry through beekeeping **modernization, collective management and product certification**.

The proposal also includes the establishment of partnerships with national parks for the sale of bee products. **Katavi National Park** presents the greatest potential. This partnership would reduce pressure on park resources, integrate farmers into the tourism supply chain, and provide additional income through the sale of honey and other products.

Investments needed

- **Estimated initial investment:** USD 30,000 every 5 years (costs include the purchase of hives - 50 hives for each of 15 groups of beekeepers; hive construction; and applying beeswax for the hive construction).
- **Average operating costs:** USD 8,000 per year (costs include maintenance costs such as hive inspection, apiary cleaning, packaging and purchase of wire for hive hanging; buckets for harvesting; transport costs; and protective clothes).

Potential areas to be implemented

- Katavi region (Tanganika district) *
- Rukwa region

*This region has been used as a reference for the estimation of potential costs and benefits.



Potential beneficiaries: **299** beekeepers: 15 groups of 15 beekeepers from Katuma, Bishamu, Ilangu, Tongwe, Imbwaga, and Bulamata wards; and 4 groups of beekeepers from wards near Katavi National Park.

Partnerships for success: Tanzania Forest Fund (TaFF) (financing); Asilia African Honey (collaborator); SNV (implementation support); Government local district beekeeping officer (implementation support).

Expected benefits

Farmers' income coming from honey sales (assumptions: 17.5 kg of honey per beehive per year, USD 3 per kg) (**39,400 USD/year**). This represents 72% of expected revenues.

Avoided costs refer to the labor costs farmers would incur if they had to hire workers or manage beekeeping independently, assuming: 5 workers/farmer group, 28 working days/worker/year, and 15 farmers group, initial labor cost of 2 USD/worker/day (**USD 4,200 the first two years, with a USD 1 cost increase by worker/day every three years**).

New incomes for farmers from extracting and selling beeswax (assumptions: 1.75 kg of beeswax per beehive per year, USD 5.37 per kg) (**7,000 USD/year**).

Financial:

	2026-2030	2026-2035	2026-2050
Total present Costs (USD)	64,862	127,458	296,912
Total present Benefits (USD)	243,023	485,265	1,170,937
Financial Net present value (FNPV) - (USD)	178,161	357,807	874,025
Financial Rate of Return (FRR) - %	-	>100%	56%
Benefit-Cost Ratio (BCR)	3.7	3.8	3.9

Environmental:

Increases biodiversity, reduces deforestation and promotes ecosystem services linked to beekeeping in the Katavi National Park, such as pollination.

Social:

It strengthens community ties, integrate youth and women in beekeeping activities (ensuring at least 30–40% of all farmers are women), promotes knowledge sharing, increases incomes and creates more sustainable livelihoods.

Break-even point: depends on the period considered:

- In the **short term** (5 years) only one initial investment is considered, and positive outcomes are anticipated from the first year.
- For the **medium-term** period (10 years), two capital investments are considered, and the break-even point is reached in **Year 2**, with a resulting positive cash flow of **USD 31,425**.
- For a longer time frame (25 years), five capital investments are included. In this case, the full investment outlay is recovered in **Year 3**, at which point a positive cash flow of **USD 5,097** is also generated.

Beekeeping has proven to be almost immediately **profitable** in the landscape, with returns further enhanced through the formation of cooperatives and the implementation of certification schemes, as well as by diversifying products to include, for example, beeswax.

Potential for success

- Solid basis for development through contracts and commitment of actors involved.
 - It will provide reliable income to farmers while promoting environmental conservation.
 - Full availability of the necessary information and material resources to strengthen and improve the skills and capabilities of beekeepers.
 - Alignment with national priorities as beekeeping is regulated by both national and local policies and strategies.
 - Capacity building in fields like as business management, quality control, and value addition will enable the groups to operate independently after initial support.
 - The model can easily be replicated in other wards, especially in areas with similar ecological conditions and community interest.

Opportunities for enabling NbS investments

Promoting beekeeping can be understood as a nature-based solution or as a conservation tool, linking forest health to livelihood improvement. Indeed, beekeeping enhances crop pollination, increasing yields of sunflowers, legumes, and vegetables. This creates positive feedback loops between biodiversity and productivity. Additionally, it could be complemented by:

- **Enrichment planting with native flowering trees.** Planting nectar-rich trees such as Croton megalocarpus, Acacia, or Calliandra supports bee health and prolongs flowering seasons, critical for honey production.