APIMONDIA SCANDINAVIA 2025
SWEDEN | DENMARK | NORWAY

PP-489 [Beekeeping for Rural Development]

UNLOCKING THE POTENTIAL OF RURAL HONEY INDUSTRY: A MARKET-DRIVEN APPROACH

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BACKGROUND

The TRADE programme is a commercialization initiative by the Malawi government with financial support from International Fund for Agriculture Development (IFAD) and OPEC Fund for International Development (OFID) to increase incomes and improve livelihoods of the smallholder producers in the rural areas. It has been investing in the honey value chain since 2022.

Figure 1: TRADE Programme current reach

CHALLENGES

- Low production and productivity
- Unorganized stakeholders (farmers and the private sector).
- Lack of proper storage facilities
- Lack of access to finance
- Not enough extension officers to promote modern bee technologies
- Limited local technology development (Kaitano, 2016).

INTERVENTIONS

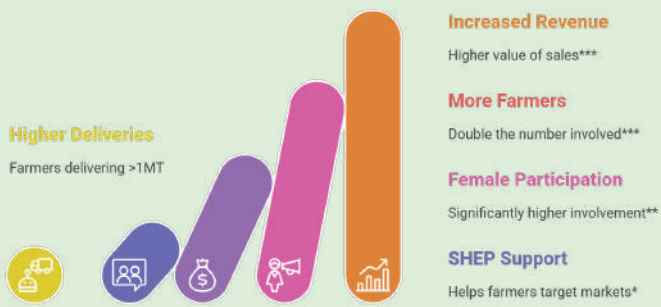
- Win-win partnerships between producers, public and private players
- The TRADE programme employs three key tools business coaching, the SHEP approach, and business meetings to foster win-win market partnerships.

OBJECTIVE OF THE STUDY

This study explores factors that would influence TRADE's interventions on achieving commercialisation in rural areas.

RESULTS - T-TEST

Table 1. Factors Influencing Farmer Groups Market Participation



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*Key; ***=1% significant level, **=5% significant level and *=10% significant level*

METHODOLOGY

- Random sampling on groups the programme is working with
- T-tests and multivariate regression
- Business coaches met farmers in a space of 6 months, business meetings were held just before the swarming season and SHEP were structured participatory trainings conducted in 12months.

RESULTS - MULTIVARIATE

Table 1: Factors affecting tools

	Business Coach	Business Meeting	SHEP
	Coef.	Coef.	Coef.
Delivered_Volume	.0494031	.4889534*	.5383566**
NKhatabay	.1899524	-.6695778***	.4796254*
Income	2.03e-08	9.35e-08	-1.14e-07
Gender Leader	-.1508279*	.2829889	-.1321609*
Farmers	-.0020749	.0008312	.0012438
Female	-.001465	.0166892	-.0152242
Youth	-.0047591	-.0114042	.0161633
Contract	.1642649***	-.2368177**	.0725528
PreviousYear	-.0493722	.1090549*	-.0596827
_cons	.1105404	.6622361	.2272235

*Key; ***=1% significant level, **=5% significant level and *=10% significant level*

DISCUSSION

- **Delivery History is a Strong Predictor of Performance:** Farmers delivering >1MT had significantly higher previous-year deliveries (4.93MT vs. 0.67MT, p<0.05) in t-test and Previous-year delivery positively influenced participation in Business Meetings (β = 0.109, p<0.10). High past performance correlates with both continued delivery and better access to support systems.
- **Group Size and Collective Action Matter:** High-volume groups had almost twice the number of farmers (97 vs. 49, p<0.01). Group size (farmers, female, youth) was not significant—but acted as control for interpreting impact of structured interventions. While group size alone may not predict access to interventions, it is a critical enabling factor for performance and sustainability.
- **Gender Inclusion Influences Outcomes:** Higher female participation was linked to higher delivery volumes (49 vs. 22, p<0.05). Female leadership negatively associated with access to Business Coaching (β = -0.151, p<0.10*) and SHEP (β = -0.132, p<0.10*). Gender-inclusive groups perform better, but female leaders face access barriers to institutional support.
- **SHEP Participation Has the Strongest Impact:** SHEP participants delivered significantly more honey (0.54MT vs. 0.04MT, p<0.10). SHEP is a strong positive predictor of delivery volumes (β = 0.538, p<0.05). SHEP is both impactful and scalable—should be prioritized for investment and rollout.
- **Contract Participation Enables Structured Engagement:** Contracted farmers were more likely to receive Business Coaching (β = 0.164, p<0.01*) but less likely to attend Business Meetings (β = -0.237, p<0.05*). Contracts formalize engagement and streamline support delivery—an effective entry point for coaching and services.

CONCLUSION

This study demonstrates that smallholder beekeepers have strong potential to drive a commercially viable honey sector when supported through inclusive and well-structured interventions. Quantitative analysis revealed that prior delivery experience, group size, increased revenue, contract participation, and structured support, particularly through the SHEP model, were positively associated with increased delivery volumes, while qualitative patterns showed that groups led by women consistently outperformed those led by men. Despite some statistical models indicating reduced access to services for female-led groups, these findings highlight the importance of actively promoting women's leadership in beekeeping cooperatives. Additionally, services that offer long-term, hands-on guidance especially those empowering farmers to identify and engage with their own markets, proved to be the most effective in stimulating sustained honey production. To unlock the full potential of rural beekeepers, future programming should prioritise gender-responsive leadership, contract-based engagement, and scalable market-oriented training models that align with both local context and commercial demand.

REFERENCES
Kaitano, Vincent. (2016). *Honey Value Chain Analysis.*

PP-489 [Beekeeping for Rural Development]
Unlocking the Potential of Rural Honey Industry: A Market-Driven Approach

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The TRADE programme has been investing in Malawi's honey value chain since 2022. The programme aims at increasing incomes of rural people through commercialization. The biggest challenge in the Malawi's honey value chain is low production. Despite various interventions aimed at boosting honey production in Malawi, national output has remained stagnant at approximately 200MT annually. TRADE programme has introduced market-driven strategies, including business coaching, SmallHolder Empowerment and Promotion (SHEP) approach, and facilitated business meetings, to address this challenge. Initial findings suggest that direct market linkages significantly increase production, with some beekeepers reporting a doubling of their output in the first year. However, the specific mechanisms driving this growth remain unclear.

The lack of clarity on which interventions contribute most effectively to production increases presents a critical gap in knowledge. While some farmers benefit from market facilitation, others do not experience the same level of success. It was essential to identify which TRADE-supported services have the most significant impact on honey production and what factors influence their effectiveness.

This study explore the relationship between TRADE's interventions and honey production outcomes. By analyzing the effectiveness of business coaching, the SHEP approach, and business meetings, the research provided insights into the most impactful strategies for commercializing the honey value chain in Malawi. The study uses data from farmer-based organizations working with the programme and was analyzed using T-tests and multivariate regression.

The results revealed that the SHEP approach had positive significant impact on production, even in the face of external challenges such as prolonged heatwaves. While participation in business meetings and business coaching showed no significant effect.

Key patterns also emerged, groups led by women consistently outperformed those led by men. Services that provided long-term exposure and hands-on guidance especially those empowering farmers to find their own markets proved to be the most effective in stimulating honey production in rural areas. This study highlights the potential of smallholder beekeepers in accessing markets, increasing productivity, and fostering a more commercially viable honey sector by promoting women's leadership in beekeeping groups and expanding long-term hands-on training.