



MEV-CAM GOOD PRACTICES: Engage, Learn, Inspire

## FROM CHARCOAL TO HONEY IN MALAWI

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### BACKGROUND

Beekeeping and the subsequent production of honey and other products provides a sustainable, reliable and lucrative livelihood for local communities in rural areas, without impacting the local environment through deforestation.

In the Karonga, Machinga and Phalombe districts of Malawi, the main source of income for local communities was charcoal production. Deforestation was increasing at an alarming rate. This put increased stress on local landscapes, decreasing agricultural productivity and making local communities vulnerable to climatic shocks. To decrease the high dependence on charcoal production as an income generating activity in these areas, the <u>Enhancing Resilience of Agroecological System Project (ERASP)</u> introduced local communities to beekeeping. The results were positive, and land degradation prevalence was reduced from 46–60 percent, to less than 40 percent over the course of the project. This good practice has excellent potential to be upscaled in similar communities across the Global South.

### MEV-CAM'S GOOD PRACTICES AT A GLANCE

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This good practice was extracted by the Food and Agriculture Organisation's Making Every Voice Count for Adaptive Management (MEV-CAM) initiative, working alongside communities participating in GEF-6's Resilient Food Systems projects to be upscaled throughout GEF-7's Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes interventions. These documents show the impact of good practices on local communities, from their own perspective. MEV-CAM is now working to share this insight through the South - South Cooperation Knowledge Gateway, a platform designed to link the local knowledge held in these good practices with technical guidance.

"Before we started bee keeping, our family relied on the sale of charcoal for survival. But now we have started hanging beehives in the forest and are harvesting over 30 kilograms of honey a month. As a group, we earn over 120 000 Kwacha (6 338 USD) a month from bee keeping." Joyce Makupete, Chairlady of Jimu Beekeeping Group in Zomba, Malawi

### FIVE SIMPLE STEPS TO IMPLEMENTATION

Identify suitable areas for beehive installation. Suitable areas often include an interested local community and a forest with plenty of flowers for pollination. If there are few suitable trees for hive hanging, it is possible to plant trees such as eucalyptus and senas species.

Approach community leaders to identify participants and create a committee who will undergo training. Conduct training in groups on several aspects of beekeeping including leadership, hive installation and monitoring, harvest, processing, and marketing. This usually takes five days, including two days of theory and three days of practical training.

Give the community a start-up package of beekeeping materials.

#### Start-up materials

CAB hives, uncapping fork, hand gloves, bee brush, stainless honey extractor, hive brand smoker, double strainer, hive tool, beekeeper protective suit, beeswax foundation sheet, gumboots, hive stand, plastic buckets, plastic jerrycan (five and 20 litre capacity), honey processing gloves, hair cup, swarm catch bag, catcher clip and beekeeping practical guide.

Oversee the installation of beehives in suitable forest areas for bee colonisation and begin baiting by using bee colony attractants such as bee wax, cow dung and cassava in the beehive. Begin the monitoring of the bee colonisation process. This includes a first inspection using adequate protective gear and smoker to ensure installation was completed correctly, and a final inspection before harvest to ensure that combs are fully capped.

Harvest the honey and conduct training on marketing and selling the product. This includes market identification, pricing, packaging, how to approach potential buyers and the benefits of selling as a group.

### WHAT HAS THIS PRACTICE ACHIEVED?



In Karonga district, two groups produced 220 kilograms of honey in one year. Income from beekeeping per household rose from roughly 4 USD per month in 2019 to 89 USD in 2021.

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Seventy-four tree nurseries established and over 587 000 seedlings planted.

# WHY SHOULD THIS PRACTICE BE UPSCALED?

### Restoration

Restoration projects at all scales contribute to the UN Decade of Ecosystem Restoration. Beekeeping contributes to ecosystem restoration by:

- Providing a viable, sustainable alternative to charcoal production.
- Utilising trees to hang beehives, which promotes the restoration of forest landscapes.
- Incentivising long-term restoration through increased income; once local communities realise the benefits of producing and selling honey, they are more engaged in forest protection.
- Encouraging pollination. Trees are often planted in areas where beekeeping is practiced to encourage pollination, which restores ecosystems through encouraging and enabling biodiversity to thrive.

### Gender

Beekeeping promotes ecosystem restoration by addressing socio-economic objectives, especially those related to gender inclusion:

- Beekeeping can be carried out by all genders.
- Honey production enables women to earn money to cover their families' needs, which is particularly important for female-headed households.
- Sixty percent of the participants were women and many took major roles in local committees.



Beekeeping is a sustainable practice that ensures local communities can continue on their own, even after the project's completion:

- Once the inputs and training have been provided, local communities acquire the knowledge and capacity to carry out the practice in the long term.
- The training on marketing and selling produce also aids with transferable skills that will ensure communities can continue benefitting from their products. In fact, the ERASP found that most communities continued to use the practice after the project.

### TIPS FOR REPLICATING THIS PRACTICE

- Ensure adequate financial resources are allocated for training and procurement of modern beehives. The draft budget for nine groups of about 20-30 members in the ERASP was around 60 000 USD for all equipment and training sessions. One CAB hive costs 110 USD.
- Strong training and capacity building on beekeeping tools and the beekeeping process is essential, to ensure communities can continue the best practice in the long-term, and teach others.

### **INTERESTED IN LEARNING MORE?**

- WOCAT SLM Database: <u>Beekeeping</u> <u>best practices</u>
- FAO Technologies and Practices for Small Agricultural Producers (TECA Platform): <u>Beekeeping practices</u>
- FAO: <u>South-South Cooperation</u> <u>Gateway</u>

- Apimondia: <u>Beekeeping contributes to</u> <u>achieve the Sustainable Development</u> <u>Goals</u>
- FAO: <u>Visual manual on good</u> <u>beekeeping practices for small-scale</u> <u>beekeepers in Africa</u>
- Resilient Food Systems knowledge centre: <u>Malawi</u>



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