



End of Grant Report for

PROJECT RENITANTELY

Supporting Rural Beekeepers to Address Key Challenges

March 2023

Introduction

Context

Madagascar is one of the poorest countries in the world, with 81% of the population surviving on less than US\$2.15 per day.¹ This disparity is amplified in the southeast Anosy region, where livelihood opportunities are extremely limited; over 98% of rural households engage in small-scale farming, animal husbandry, and fishing to earn a living.² With failed harvests drastically reducing food and income, there is an urgent need to strengthen alternative, sustainable livelihood strategies.

Project Overview

Project Renitantely (Malagasy for honey bee) aims to improve beekeeping as a viable and sustainable livelihood and has supported beekeepers in the remote Anosy region since 2016. Building on the successes of previous project phases, Project Renitantely is currently responding to key challenges that limit the potential of beekeeping as a profitable and reliable livelihood. From September 2022 to March 2023, activities aimed to improve market access for beekeepers, supplement forage for bees, and support beekeepers to expand and maintain their apiaries.

Activities

Improved Market Access

Hive Adaptation

To improve beekeepers' access to larger markets, SEED met with Senteurs et Saveurs du Monde (SSM), a Malagasy company that markets to international consumers. SSM operates near Project Renitantely's six target communities and employs a honey collection truck, in which they can mechanically extract honey from the hives. Upon learning SSM's requirements, SEED provided beekeepers with materials to construct supers* and hive frames, adapting hives to enable potential sales to SSM and other international buyers.

To further capitalise on market opportunities, SEED supported beekeepers in registering with the Malagasy Ministry of Agriculture and Livestock to receive a unique code for their apiary. Criteria for registration included a minimum number of hives with supers and frames and the use of specialised equipment. Most beekeepers met these criteria and are now registered, enabling them to pursue formal sales. To finalise the registration process, an official handover ceremony will be organised by the Ministry. Following registration, beekeepers in Vatambe received a mechanical honey extractor from another NGO, expanding the impact of the hive adaptations beyond project scope.

In November, beekeepers received training on creating wax sheets, used as a base for the bees to build their honeycomb. With limited resources available in rural areas, SEED developed equipment for beekeepers to make the sheets with wax harvested from their own hives, reducing overall costs and improving the sustainability of their livelihood.

* Placed on top of the hive, the supers are used by the bees to store surplus honey.



Project beekeepers making wax sheets.

Forage Supplementation

Lack of forage in the region negatively affects honey production, driving colonies to abscond from beekeepers' hives and leading to smaller populations of wild honey bees. To increase available forage in the area, (fruit) tree seedlings were distributed to beekeepers in March, including pink peppercorn, papaya, mango, lychee, and moringa. Tree species were chosen upon request of the beekeepers and are known to grow well in the area. Besides being beneficial for the bees, pink peppercorn is a common cash crop that can be sold or used for cooking. Additionally, lychee honey is of high interest to both regional and international buyers. Planted in line with the rainy season, the seedlings will provide supplementary forage for the bees during the colder months (May – August), whilst also providing the beekeepers with additional food and income.

Maintenance and Expansion of Apiaries

To professionalise their livelihood, it is essential that beekeepers are able to expand their business and consequently grow their income. Two highly skilled local beekeepers were recruited by SEED as technicians to provide personalised support to other project beekeepers. Through monthly monitoring visits, beekeepers have been supported to maintain healthy hives, populate hives with bee colonies, and expand their apiaries.

Maintaining Healthy Hives

Each month, the technicians have supported beekeepers to inspect their hives for insects and pests, building their capacity to maintain a healthy apiary. To combat the widespread *Varroa destructor*, a parasitic mite that has severe implications for the health of bee colonies, the technicians have been teaching beekeepers to apply various local natural treatments and pest management methods.



Project Coordinator Juve (right) is helping a beekeeper to inspect his hives for Varroa.



Project beekeeper, Christophe, receiving materials to build new hives.

Populating Hives

The technicians have also assisted beekeepers with populating empty hives. In November and December, the technicians delivered training to teach beekeepers how to use swarm attractant to catch wild bee colonies from the forest. In addition, the technicians have supported the management of three bee banks, shared between communities and used to populate local hives, working to increase the number of available colonies in the area.

Apiary Expansion

To further increase hive numbers, SEED supported beekeepers to repair broken hives and build new ones. Beekeepers were provided with the option to build up to five new hives, of which 50% of the material cost was covered by SEED. To encourage beekeepers to professionalise their livelihood, beekeepers were required to have at least five populated hives, and 75% of their total hive number populated. Materials for 48 subsidised hives were delivered to 12 project beekeepers. During the grant period, the total number of hives increased from 320 to 450.

Story from the Field

Originally a farmer, Pierros first began beekeeping with the support of SEED in 2016 and has been involved in Project Renitantly ever since. Over the past seven years, Pierros has gradually built his skills and continuously grown his business. His apiary now counts 47 hives and beekeeping has become his main source of income, supplemented by agriculture and livestock rearing. Having invested in his apiary, increased honey production has enabled Pierros to open a small grocery shop, further diversifying his income and improving his financial security. In early 2022, Pierros was recruited as beekeeping technician for Project Renitantly to share his expertise with fellow beekeepers.



Project beekeeper, Elercene (left), and beekeeping technician, Pierros (right), are inspecting the hive for Varroa.

Being a beekeeper himself, Pierros experiences the challenges that beekeepers in the region are facing: “Climate change, the lack of flowers, the lack of bees in the forest, the high cost of equipment, and many different bee diseases.” Through monthly monitoring visits, Pierros helps to improve the sustainability of beekeeping in his region, delivering training to build capacity among beekeepers and providing hands-on support with any arising issues.

“Honey is one of the sources of income for the treasury of the region, honey is a medicine, it promotes fruit production”

- Pierros

As a true success story of Project Renitantly, it is needless to say that beekeeping technician, Pierros, has become integral to the success of the project, with his knowledge of the local context central to the approach. In the meantime, Pierros continues to achieve personal milestones harvesting a record total of 75 litres of honey in December 2022.



Pierros harvesting honey from his hives in December.

Next Steps

Aiming to strengthen the sustainability of beekeeping in the region, Project Renitantly has submitted a request to EurHope e.V. for additional funding to continue to improve the business potential of rural beekeeping. SEED will continue to support beekeepers to partner with buyers like SSM and search for new routes to market, whilst providing beekeepers with training to improve technical and entrepreneurial skills. Furthermore, SEED will provide additional opportunities for beekeepers to expand their apiaries through subsidised hives. Beekeepers will also continue to receive personalised support from the local technicians to maintain healthy hives, assisting with pest management, populating hives, and caring for the recently planted fruit trees.

References

¹ The World Bank (2022). The World Bank in Madagascar: Overview.

<https://www.worldbank.org/en/country/madagascar/overview>

² Institut National de la Statistique (INSTAT) (2020). TROISIEME RECENSEMENT GENERAL DE LA POPULATION ET DE L'HABITATION (RGPH-3).