





**A Project Update for** 

# PROJECT RENITANTELY: INTERIM PHASE

**Supporting Rural Beekeepers to Address Key Challenges** 

#### Introduction

Madagascar is one of the poorest countries in the world, with 75% of the population surviving on less than US\$1.90 per day. In particular, the southeast region of Anosy experiences an exacerbated disparity of income and living standards due to limited livelihood opportunities. In this region, over 98% of rural households rely on small-scale farming, animal husbandry, and fishing as their primary sources of income. Recent failed harvests have severely impacted both food security and income levels in the region, necessitating the urgent development of alternative and sustainable livelihood strategies.

Beekeeping has emerged as a promising opportunity for households to supplement their income and complements traditional farming activities, as it is not a time or land intensive activity. Project Renitantely (which means honeybee in Malagasy) aims to enhance beekeeping as a viable and sustainable livelihood. The interim phase builds on the successes of Project Renitantely: Phase I, which tackled key challenges faced by beekeepers in Anosy including, restricted market access, inadequate forage, and a lack of capital to invest in their enterprises. With these key areas of focus, SEED Madagascar's (SEED) goal is to empower beekeepers and enable them to construct a more prosperous future for themselves and their communities.

#### **Progress to Date**

The progress made from January to December 2023 of the interim phase of Project Renitantely, is outlined below.

#### **Market Access**

Over the course of 2023, over 1,000 litres of honey and 67kg of wax were produced and sold by 16 participating beekeepers, collectively generating 1,111,0000 MGA (approximately £1,924). Through activities to support the growth of apiaries and professionalism of beekeeping activities, participating beekeepers have seen an increase in honey yields and thus their income. Participants have reported that this income has assisted in the procurement of items to increase quality of life, such as solar panels, cattle, and land to cultivate rice.

To enhance market access, SEED supported all of the participating beekeepers to acquire apiary identification codes from the Ministry of Agriculture and Livestock, facilitating official validation and access to new networks and markets. Criteria to attain an apiary code included having five populated, modern hives, and ensuring beekeepers were able to harvest sufficient amounts of honey to be recognised as an official business.

Furthermore, SEED supported beekeepers to establish a formal contract with Senteurs et Saveurs du Monde (SSM), an international honey exporter. In order to sell to SSM, beekeepers must meet a set of criteria points including meeting the international honey quality and extraction standards. In addition, beekeepers must use modern hives and natural, rather than chemical, pest management strategies. By working to meet these criteria, beekeeper businesses exhibited increased professionalism and are now well placed to meet future buyer expectations.

#### **Forage Supplementation**

In Anosy, the lack of available forage often causes bee colonies to abandon beekeepers' hives. This can also result in smaller populations of wild honeybees available for beekeepers to capture and grow their apiaries. To enhance forage availability, 465 tree seedlings and 155 vegetable seed packets were distributed to beekeepers in March 2023. Training in growing and maintaining the plants was also delivered to further support project participants.

Following the monitoring of 160 seedlings in November, approximately 60% had survived, providing lasting support to build apiary resilience. Additionally, the vegetable seeds of courgettes, tomatoes, and petsay that were distributed to the beekeepers, were successfully harvested, and sold. From these sales, beekeepers collectively earned an estimated 533,000 MGA, successfully supplementing beekeeper's income outside of honey harvesting season.



The apiary of a beekeeper in Vatambe

#### **Maintenance and Expansion of Apiaries**

Two highly skilled local beekeepers, who were previously participants in Renitantely: Phase I, were recruited by SEED as technicians to offer personalised assistance to other beekeepers involved in the interim phase of the project. The technicians provided regular monitoring visits, during which participant beekeepers built valuable skills in hive construction, maintenance, and natural pest control.

To support beekeepers to grow their apiaries through populating new hives, the beekeepers completed training in the use of swarm attractants<sup>1</sup> to capture wild colonies. Beekeepers also received training on hive splitting, which involves transplanting a portion of a bee colony to populate a new hive. Moreover, beekeepers were taught modern apiculture techniques such as making wax sheets to place in hive frames. This method eliminates the need for bees to spend time and energy producing wax, and as a result, leads to increased honey yields for the beekeepers.

In order to promote apiary expansion and support higher yields, SEED implemented a subsidised hive building scheme. As part of the programme, participating beekeepers with healthy apiaries were provided with 50% of necessary construction materials and trained in hive building techniques. Through the implementation of this initiative, SEED has successfully supported the construction of 48 hives to 12 beekeepers.

One of the main challenges faced by beekeepers is varroa, a parasitic mite that poses substantial threats to the health of bee colonies. Through the distribution of resources and training to encourage the adoption of *adigasy*, a Malagasy word referring to natural pest management, beekeepers have gained knowledge and skills in how to offset the threat of varroa and protect the health of hives. The use of *adigasy* in comparison to chemical alternatives prevents any negative impacts on the natural environment and complies with the requirements of SSM and eco-certification.

<sup>&</sup>lt;sup>1</sup> Chemicals or other materials which mimic the pheromones of honeybees which can be sprayed on an empty hive to attract bees to populate it.

### **Next Steps**

SEED has been developing the next phase of project Renitantely with an aim to start in the middle of 2024. The new phase will build on the success of past phases by expanding into three new communities in addition to the current locations. Leveraging the expertise gained by the project coordinator and beekeeping technicians, technical skills training will be provided to empower new participants to professionalise their beekeeping businesses.

In addition, Renitantely Phase II aims to increase the financial resilience of beekeeping households by supporting the development of financial and business skills through training and strengthening new and existing routes to market. To further improve market access, this next phase will explore the establishment of honey quality standards to align with buyer expectations.

Community engagement efforts and a focus on utilising natural resources to improve the sustainability of beekeeping will ensure beekeepers and their communities have improved capacity to manage and maintain their local environment.



The Project Coordinator and a beekeeping technician checking on a participant's hive in Vatambe.

## **Beekeeping in Tsagnoriha: A Family Enterprise**

Elercene is a Project Renitantely beekeeper from the community of Tsagnoriha, a small rural market village in the commune of Mahatalaky. Elercene and his family are farmers and grow vegetables and staple crops in the smallholding around their home. When he first began working with Project Renitantely during Phase I, Elercene had just one beehive. Each harvest season he would extract and consume the honey and wax for personal consumption. With the support from SEED, Elercene has been able to expand and professionalise his beekeeping business and as of December 2023, now manages an apiary of 32 beehives. Elercene has built a small enterprise, bottling, and selling honey to his community at the local market. Through Project Renitantely, Elercene has strengthened his skills, completed technical training, and joined the hive building subsidy programme. Over time

he has applied these skills to increase his honey yield and sustainably manage the local environment through planting and forage supplementation. Last year, Elercene was recognised by the Ministry of Agriculture and Livestock and received a formal hive code.

Beekeeping has helped Elercene supplement his farming activities and diversified his household's income. This enabled him and his family to build their resilience and better withstand shocks and stresses. Elercene is now teaching his son valuable beekeeping techniques, passing on both traditional and contemporary apiculture knowledge. Together Elercene and his son maintain their hives and are working to further expand their apiary. For Elercene, beekeeping is helping to secure a sustainable income for future generations.



Elercene and his family tending to their beehives.

#### **References**

<sup>&</sup>lt;sup>1</sup> The World Bank (2022). The World Bank in Madagascar: Overview. Available at: https://www.worldbank.org/en/country/madagascar/overview. [Accessed February 20<sup>th</sup>, 2024]

<sup>&</sup>lt;sup>2</sup> Institut National de la Statistique (INSTAT) (2020). Troisième Recensement General de la Population et de L'Habitation (RGPH3). Available at: <a href="https://www.instat.mg/documents/upload/main/INSTAT\_RGPH3-Definitif-ResultatsGlogaux-Tome1">https://www.instat.mg/documents/upload/main/INSTAT\_RGPH3-Definitif-ResultatsGlogaux-Tome1</a> 17-2021.pdf. [Accessed February 20<sup>th</sup>, 2024]