



seed **madagascar**
sustainable environment, education & development



A six-month progress report for

PROJECT MAHAMPHY

Improving and sustaining livelihoods for traditional female reed weavers through targeted capacity development and research

Summary

Context

Madagascar is globally renowned for its rich biodiversity, yet the country is facing chronic poverty, with 75% of the population living in extreme poverty (World Bank, 2019). Livelihood opportunities for women are limited; those from the Anosy region typically work with *mahampy* (*Lepironia mucronata*), a local reed, to weave traditional products to provide a small but vital income for their households.

However, weaving is labour-intensive, with a single mat taking two days to make and selling for as little as 4,000 MGA (US\$1.14). Selling as individuals, the weavers have little negotiation power and are vulnerable to pricing set by buyers in a supplier rich market. This imbalance is exasperated by weavers' daily need to convert products into income in order to contribute to their families' daily needs in terms of food, clothing, medicine, and housing.

The source of raw material is at threat from human and environmental risks. Poor harvesting techniques, an ever-growing population, and yearly-occurring fires place the reed beds' health under increasing risk. Destruction of the reed beds threatens the vital livelihood of *mahampy* weaving and eliminates the wide range of ecosystem services provided by those wetlands.

Project Overview

SEED Madagascar is aiming to improve the livelihoods of rural women in Madagascar whilst ensuring that the reed beds upon which they rely are healthy, resilient, and productive. In-depth research into market, sociological, and environmental factors will inform SEED's approach to achieving the project's objectives: foster effective support mechanisms for weavers through the establishment of a Cooperative; train the weavers to capitalise on opportunities for improving income generation; and implement sustainable management and monitoring practices to safeguard *mahampy* resources.

Summary of Six-Month Report

This report focuses on the research conducted by SEED's Women's Livelihood and Wetland Specialists during the first six months of the project (April 2019 – October 2019). Relevant market research, biophysical and socio-economic surveys, key informant interviews, remote mapping of reed beds, and observational data collection have been conducted, advancing the following key outcomes:

1. An increased understanding of existing mahampy markets in Sainte Luce, Mahatalaky, and in the wider Anosy region;
2. An in-depth, contextualised understanding of the cultural and social factors associated with mahampy weaving and levels of technical skill and knowledge held by the weavers; and
3. An increased understanding of biophysical wetland characteristics, properties, health, and ecosystem services of reeds and wetlands in general.

Activity Detail

Project activities conducted between April and June 2019 focussed on engaging key stakeholders and planning project activities.

The project was officially launched to stakeholders on July 12th 2019. Representatives from both local and national ministries, and local government offices, expressed their enthusiasm for the project's aim to simultaneously address the conservation and livelihood aspect of *mahampy* weaving.

Research activities, which were conducted between April to October 2019, detailed below as Outcomes 1 – 3, aimed to establish a full understanding of the barriers and opportunities facing *mahampy* weavers through market-based, socio-economic, and conservation research. Findings from this research can be found in the section *Research Results Summary* below.

Outcome 1: An increased understanding of existing *mahampy* markets in Sainte Luce, Mahatalaky¹ and in the wider Anosy region

Output 1.1: Produce a report detailing analysis of markets and business practices of other women/weaving Cooperatives/organisations

Interviews with national and international specialists and Cooperatives

To inform formal research towards this output, the Women's Livelihood Specialist contacted craft cooperatives and international wholesale retailers of handmade crafts², who provided information about the international market for handmade crafts, the challenges and successes of starting local cooperatives, and the range of products that are sold in these markets. This was complemented by insights on application in a local context by Hanta Rajoharison, who has in depth experience working with women's craft cooperatives in Madagascar.

Complete market research using industry standard models and select qualitative methodologies

Using internationally recognised market analysis models and qualitative methodologies, the Women's Livelihood Specialist mapped the flow of the market and interaction between buyers, resellers, and weavers. Additionally, an assessment of the potential to produce and sell value-added products (VAPs) was conducted. The initial research designed to inform the future VAP pilot included an exploration of weaving with different types of reeds/plants, and a review of potential *mahampy* products designed to meet tourist and volunteer buying trends.

Market visits and interviews in Mahatalaky and Fort Dauphin

33 interviews with resellers in Mahatalaky and four interviews with resellers in Fort Dauphin were conducted in July and August 2019 to understand the market for *mahampy* products in southeast Madagascar.

Market visit and interviews in Ankaramena

12 interviews were conducted in October with weavers and resellers in Ankaramena, a market with a high supply of *mahampy* products, providing insight into how the price and demand of *mahampy* products changes when sold further from the production centre. This information will assist the project team when considering possible directions for the VAP pilot, and the cost benefit of transporting products to regional markets.

¹ Note on the regional administrative centres of rural Madagascar: Mahatalaky is a regional commune in the Province of Anosy in southeastern Madagascar enveloping 4 rural *fokontany*. A *fokontany* is the smallest administrative unit of population centre. Saint Luce is one of the four *fokontany* that make up the commune of Mahatalaky. Saint Luce, in turn, is made up of three hamlet communities: Ambandrika, Ampanasatomboky, and Manafiafy. Ankaramena is a separate commune to the south of Fort Dauphin, the provincial town that sits between Ankaramena and Mahatalaky communes.

² Organisations spoken to include: Branch Out Market (online retailer), Women Craft (Tanzanian weaving cooperative), and Cojoyla (Guatemalan textile cooperative).



Weavers registering their attendance at one of SEED Madagascar's focus groups for Project Mahampy

Outcome 2: Develop an in-depth, contextualised understanding of the cultural and social factors associated with *mahampy* weaving

Output 2.1: Produce a socio-economic report concerning *mahampy* weaving and the Mat Money³ issue in the Anosy region

Key informant interviews with weavers

The team conducted 65 interviews, 5 focus groups and 104 surveys across the Saint Luce communities. Topics were divided into four different categories:

1. Harvesting and Weaving Techniques
2. Social and Cultural Importance of *Mahampy*
3. Cooperative Willingness and Expectations
4. Informal 'Mat Money' Practice

Completion of baseline assessment

At the end of July 2019, Open Data Kit (ODK) surveys⁴ were tested and survey questions sense-checked to ensure translation accuracy before being rolled out to programme beneficiaries across the focus communities.

Baseline focus groups, interviews, and surveys were conducted at the end of August 2019. The purpose was to gain a deeper understanding of the *mahampy* weaving process, evaluate interest in the Cooperative and VAP potential, and learn about the informal 'mat money' system.

³ Locally known as *Vola Tsihy*, 'mat money' refers to an informal welfare system that sees the most vulnerable women paid for specific tasks in the production process, often less than what is proportionate to the end product's final sale price.

⁴ An open source mobile-based data collection system



A Mahampy reedbed in Sainte Luce

Outcome 3: Develop an understanding of biophysical wetland characteristics, properties, health and ecosystem services of reeds and wetlands in general

Output 3.1: Produce a technical report detailing the health of *mahampy* beds and their uses by the communities

Visit to QIT Madagascar Minerals (QMM)⁵ site 'Mandena'

The Mahampy Project Team visited QMM's Environmental Research Centre (TBSE), which focusses on cultivating alternative community reedbeds. TBSE has tested various cultivation and harvesting techniques by establishing a control area where *mahampy* and other reeds are left to grow unimpeded. This enabled the SEED team to study the effect of the two main harvesting techniques, pulling versus cutting of reeds, and make recommendations towards maintaining healthy, productive, and sustainable reedbeds.

Key Informant Interviews

Key informant interviews were conducted that looked at specific issues of reedbed use. Questions focussed on the demographic characteristics of weavers, the reedbeds they frequented, the local *mahampy* economy in terms of prices and number of weavers, and the traditional and social importance of weaving.

⁵ QIT Madagascar Minerals is a Canadian mining company operating in the Fort-Dauphin region.

Complete delineation of reedbeds and wetland attributes through mapping and data collection

Throughout the research phase of the project (April-October 2019), the Wetlands Specialist developed a database and associated map of reed bed sites in and around Sainte Luce. The database contains information on local names and the GPS location of reed beds, their boundaries, and hydrological information. Additional data regarding fires that impact the reed beds were gathered, looking at the frequency of fire events, specific months fires occur, permanence of fire scars, and recovery time and occurrence of fires trends. Finally, the number of weavers actively extracting reeds from each site as well as their pattern of reed harvesting over a six-month period was analysed.



Graphic showing reedbed areas (highlighted blue) around the proposed Weavers' Cooperative Studio location in Saint Luce

Biophysical baseline survey

Baseline surveys and interviews were conducted in Sainte Luce to understand the current condition of reed beds in the region. Questions aimed to understand which collection sites are used most regularly by weavers, when they go there, why they prefer certain reedbeds over others, and the perceived decline in the availability of reeds and the main reasons for this.

Research Results Summary

Conservation and Reedbed Research

Analysis of collected data has been delayed due to compassionate leave granted to SEED's Wetland Specialist.

Socio-Economic Research

Market Research

The *mahampy* industry as a whole is reflective of the economic model of a perfectly competitive market, because there is a homogenous product; all firms (women weavers) have access to the factors of production; there is shared knowledge of product prices; a large number of buyers and sellers; low barriers to entry/exit of the market; and profit maximisation is assumed to be the key objective.

The prices of *mahampy* goods are very similar between Mahatalaky, Fort Dauphin and Ankaramena, but are all higher than prices offered in Sainte Luce. Further, the majority of weavers noted that September to November are the worst selling months, while June to August offer the best prices.

Since perfectly competitive markets typically offer low profit in the long-term, as we see in the *mahampy* market, the following priorities were identified: make transportation costs more efficient to external markets, and find new markets for the Cooperative to access.

Sociological Research

Mahampy, specifically *mahampy* mats, holds immense cultural value, and are present at funerals, weddings, and births. Still, a majority of weavers noted that they would like to learn how to weave other items and with different materials. The majority of weavers surveyed buy bundles of *mahampy* instead of harvesting for a variety of personal reasons, including: health issues, old age, having young children to care for, pregnancy, and having no time to harvest. There is widespread enthusiasm surrounding the creation of the Weavers' Cooperative and every woman weaver interviewed expressed interest in joining.



A prospective member of the Weavers' Cooperative weaving outside their home

Project Activity Tracker

Objective 1		Establish a full understanding of the barriers and opportunities facing mahampy weavers through market-based, socio-economic, and environmental research	
Output	Activity	Description	Status
Output 1.1		Produce a report detailing the market analysis and analysis of the business practices of other international women/weaving Cooperatives/organisations	Delivered
	Activity 1.1.1	Complete market research using industry standard models and select qualitative methodologies	Delivered
	Activity 1.1.2	Perform 20 interviews with traders, buyers and weavers in Mahatalaky and Fort Dauphin <i>A total of 49 interviews were conducted by SEED's Women's Livelihoods Specialist</i>	Delivered
Output 2.1		Produce a socio-economic report analysing <i>mahampy</i> weaving and the <i>vola tsihy</i> (mat money) in the Anosy region	Delivered
	Activity 2.1.1	Complete 10 focus groups and 20 key informant interviews concerning socio-economic topics <i>A total of 5 focus groups and 65 interviews were conducted by SEED's Women's Livelihoods Specialist. While SEED has not achieved the target number of focus groups, participation with interviews was much higher. SEED believes that, on balance, enough data have been collected to accurately reflect the socio-economic situation and to consider this activity 'Delivered'.</i>	Delivered
	Activity 2.1.2	Complete socio-economic baseline survey with 100 weavers <i>A total of 104 surveys were conducted by SEED's Women's Livelihoods Specialist</i>	Delivered
Output 3.1		Produce a technical report detailing the health of mahampy beds and their uses by the communities Report is yet to be finalised due to compassionate leave taken by SEED's Wetland Specialist. Expected end of December 2019.	In Progress (Delayed)
	Activity 3.1.1	Perform 10 key informant interviews with community members concerning reed bed conservation	Delivered
	Activity 3.1.2	Complete delineation of wetlands and wetland attributes mapping and data collection	Delivered
	Activity 3.1.3	Execute a biophysical survey	Delivered

Monitoring, Evaluation, and Learning

Introduction to Project Mahampy's Monitoring, Evaluation, and Learning

SEED's project team will work with the Weavers' Cooperative to ensure the research component of Project Mahampy is effectively and continually incorporated into project design. The team has developed an MEL Framework that will enable the project to remain responsive to emerging challenges and learning. Baseline surveys followed by midterm and final evaluations will adopt qualitative and quantitative methods to assess progress towards project objectives. These methods include:

- I. **Focus groups**: to determine perceptions and gather feedback on project impact from weavers and key project stakeholders;
- II. **Key informant interviews**: to determine perceptions and gather feedback on project impact from weavers and key project stakeholders;
- III. **Knowledge, attitudes, and practices (KAP) surveys**: to measure change in knowledge and practice of *mahampy* weaving and sustainable swamp management;
- IV. **Logbooks**: to monitor the production, storage, and sales of *mahampy* products; training sessions; and Cooperative meetings; and
- V. **Remote sensing data and observation**: to measure, map, and monitor the health of the *mahampy* reed beds.

A second, smaller baseline is planned to measure more precisely the economic and social situation of members of the Cooperative before and after project activities.

Baseline Methodology

A total of 65 key informant interviews were conducted with women weavers and resellers, including: 18 with weavers in Sainte Luce, 30 with weavers and resellers in Mahatalaky, 5 with resellers in Fort Dauphin and 12 with weavers and resellers in Ankaramena. Participants in Sainte Luce were all women weavers chosen based on a combination of simple random sampling, a system of random selection, and snowball sampling, a methodology where participants recruit other participants.

Five focus groups were carried out at the *Chef Fokontany's* (the local chief of a community) office in Ampanasatomboky, the hamlet located in the middle of Sainte Luce. They were planned and scheduled by the Project Coordinator and facilitated by SEED's Head of Environment and Sustainable Livelihoods. The *Chef Fokontany* chose which women weavers from Sainte Luce would participate in the focus group discussions. Each focus group lasted between one and two hours. In order to capture the perspective of women weavers accurately, focus groups were organised by hamlet; two were composed of a mix of women from each hamlet, while the remaining focus groups were members of the same hamlet.

104 Open Data Kit (ODK) surveys were conducted in Sainte Luce, composed of 47 women weavers from Ambandrika, 29 from Ampanasatomboky and 28 from Manafiafy. Surveys were carried out by the project team and local guides working with SEED's Conservation and Research Program (SCRIP). Survey questions were organised by theme and reviewed by national staff to ensure applicability and appropriateness. Data were transposed to a Google Sheets document that is available to project team members.

Conclusion

Project Mahampy's six-month research phase conducted all planned activities except five focus groups, which have supplemented by 45 additional key informant interviews. Delays to the write up of SEED's Conservation Management Plan, and its effect on upcoming activities, is being reviewed by the team and a new timetable for delivery will be announced.

Findings from both the conservation and socio-economic baselines will inform ongoing implementation of Project Mahampy, and will be disseminated to key project stakeholders. Continuous two-way communication with the weavers of Sainte Luce will enable SEED to adapt to emerging needs. Project year one (April 2019 – March 2020) will conclude with the official establishment of the Weavers' Cooperative, the building of a physical studio, and the start of training sessions.

References

World Bank (2019). *The World Bank In Madagascar*. [Online] Available at: <http://www.worldbank.org/en/country/madagascar/overview>. [Accessed September 2019]



Mahampy harvester carrying a bundle of mahampy from the reedbeds back to the nearby village for drying