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A 12-Month Progress Report for

The Ala Programme Phase III

In-situ Conservation of Endangered Lemurs through Reforestation in the Sainte Luce Littoral Forest

August 2025

1. Introduction

1.1 Context

Madagascar ranks 177th out of 193 countries on the Human Development Index (HDI), reflecting persistent challenges in health, education, and living standards.[1] Nationally, 75.2% of the population live in multidimensional poverty, one of the highest in the world with one in every two people living on less than US$2.15 per day. This is even more pronounced in the Anosy region of southeastern Madagascar, where this figure increases to 83%.[2]

With some of the highest levels of endemism seen globally,[3] Madagascar is one of the world's most significant conservation priorities.[4] Despite this status, forest loss poses a severe threat to Madagascar's unique flora and fauna, with 5.15 million hectares of forest cover lost to deforestation between 2001 and 2024.[5] Consequently, lemurs are the world's most endangered mammal group, whereby 98% of lemur species are threatened with extinction and 31% are critically endangered.[6] Littoral forests are one of the most threatened ecosystems in Madagascar,[7] with the Anosy region containing some of the few remaining viable littoral forests in the country, including the Sainte Luce littoral forest (SLLF). The SLLF faces numerous threats, including industrial-scale mining operations, high community dependence on natural resources, logging, and *tavy* (the clearance of land with fire for agricultural purposes). The SLLF supports disconnected populations of four Endangered lemur species, numerous amphibian and reptilian species, and a rich diversity of invertebrate and floral species, many of which are locally endemic.

Degradation of the SLLF threatens the survival of the four lemur species that depend upon it. The three nocturnal lemur species are unable to traverse the open land between forest fragments. Namely, the Anosy Mouse Lemur (*Microcebus tanosi*), the Southern Woolly Lemur (*Avahi meridionalis*), and the Thomas' Dwarf Lemur (*Cheirogaleus thomasi*). Thus, deforestation fragments lemur habitat, genetically isolating sub-populations, contributing to increased mortality rates and leaving these lemur species vulnerable to the risk of extirpation and extinction.

Figure 1 – A map of the Ala Programme Forest corridors in the SLLF and the community of Sainte Luce.

Cover Image - Nursery Manager, tending to a bed in the Ala Nursery. Courtesy of Safidy Andrianantenaina

1.2 Ala Programme Overview

In response to the threats facing the SLLF, SEED Madagascar (SEED) developed the Ala Programme (*ala* meaning forest in Malagasy). The Ala Programme is a ten-year littoral forest conservation strategy, which acts in one of three protected fragments of the SLLF, S8. The Programme aims to improve habitat connectivity and species dispersal between S8 and nearby littoral forest remnants through the establishment of forest corridors.

The Ala Programme directly supports the in-situ conservation of three Endangered nocturnal lemur species that cannot traverse the open land created by deforestation. The Programme also indirectly conserves a fourth species of lemur, the Red Collared Brown Lemur (*Eulemur collaris*), and a large number of herpetofauna and invertebrate species, including the Critically Endangered *Phelsuma antanosy*.

During Phase I of the Ala Programme (April 2019 - March 2021), SEED and key local actors planted four forest corridors, spanning a total of 1.64ha, with both *Acacia mangium* (Acacia) and native seedlings (natives). In Phase II (June 2021 – May 2024), the available habitat was increased by expanding the original corridors and establishing a fifth corridor, resulting in a total corridor area of 3.72 ha. To date, 88ha of protected littoral forest are connected by the Ala corridors.

The two-year Ala Programme Phase III began in August 2024 and builds on the progress of Phases I and II to conserve endangered lemur species by improving habitat connectivity in SLLF fragment S8 through the establishment of forest corridors. Additionally, Phase III will disseminate learnings on community forest usage patterns to advocate for community needs, engage with local forest management structures to improve communication, and increase available knowledge on littoral forest biodiversity.

In October 2024, a significant Programme milestone was achieved, with nocturnal lemurs recorded as using the Ala Forest Corridors for the first time. One Thomas' Dwarf Lemur *(Cheirogaleus thomasi)* was spotted by a camera trap in Corridor 3. Since October, lemurs have been recorded in the corridors on three different occasions. In October and November 2024, Thomas' Dwarf lemurs (*Cheirogaleus thomasi)* were recorded in Corridor 3 twice, once by a camera trap and once on a nocturnal survey. The nocturnal arboreal lemurs that the Ala Programme targets have not been recorded since a large fire affected the corridors in January 2025. The fire is described in greater detail in the Phase III Six-Month Report.[8] Collared Brown Lemurs (*Eulemur collaris*) however, have been captured on camera traps in February 2025 in Corridor 3 and April 2025 in Corridor 4. While not directly contributing to the Ala's Programme's conservation goals, their presence in the corridors indicates that they remain an attractive lemur habitat.

1.3 Report and Progress Summary

This report covers progress on activities during the last six months (February – August 2025) of the Ala Programme Phase III. This phase of the programme has been marked by a series of extreme climatic events that have placed immense pressure on the landscapes and communities in which SEED works. Following an exceptional drought in late 2024 and a major fire in January 2025, the region was struck by Tropical Storm Jude, which brought winds of up to 125km/h in March 2025.[9] These back-to-back events caused significant damage to the Ala corridors, degraded lemur habitat, and placed additional strain on already vulnerable communities.

Despite the difficult conditions presented by climactic events, the Ala Programme remains on track. This report details the impact of these weather events on the Programme, the recovery activities implemented, progress towards achieving planned outcomes, key lessons learned, and next steps. The planting season of 2025 was successful, meeting expectations and nearly matching previous years' numbers. Additionally, improvements to planting capacity should result in significantly improved corridor management. Forest threats were mitigated by clearing corridor firebreaks, re-recruiting and training fire agents, assessing the condition of fire mitigation equipment, and conducting awareness workshops in partner communities (Outcome 1). The completed interactive map displaying protected areas, resource use patterns, and ecological data in Sainte Luce promises to

improve SEED's ability to advocate effectively to key actors for the improved protection of the SLLF (Outcome 2). Effective coordination and upskilling activities have improved the management capabilities of key stakeholders and enhanced collaboration between forest management bodies (Outcome 3). Finally, ongoing monitoring has provided the Ala team with a clear picture of the ecological conditions in the Ala corridors and SSLF, while producing knowledge that will enhance the broader scientific understanding of biodiversity in these areas (Outcome 4). Despite setbacks, the central elements of the Ala Programme Phase III have progressed well; these achievements reflect the resilience and adaptability of SEED and its partners in the face of increasingly unpredictable environmental conditions.

2. Activity Detail

2.1 Outcome One: Forest Corridors

2.1.1 Nursery Development

Increasing seedling collection, nursery capacity, and native seedling planting is a core component of SEED's fire recovery strategy. Seedling collection during Phase III has surpassed previous totals with 17,000 natives currently in the nursery, already doubling the total number of natives collected in 2024. Since the beginning of June 2025, the nursery team has consistently achieved the monthly target of collecting 5,500 seedlings so that the expanded nursery will be filled by the onset of seasonal rains in December 2024 or January 2025. To ensure that the seedlings collected are of optimal quality and the correct species, members of SEED's Conservation Research Programme (SCRP) team meet weekly with nursery staff to review the number and quality of seedlings collected.

Figure 2 – The Ala Nursery before expansion. 18 new beds will be added to the nursery by the end of 2025. Courtesy of Safidy Andrianantenaina

SEED began trialling new seedling pots from the Madagascar-based organisation Omni Verdi in the Ala Nursery in late 2024. The trialled pots are longer but smaller in diameter than conventional polypots and require a new nursery bed system. These pots demonstrated improved germination rates and are expected to yield stronger root systems. While the trial showed promising results, the Ala Nursery staff found maintaining the new bed to be difficult and expressed a preference for the more conventional polypots. SEED is currently evaluating whether expanded use of the new system is feasible given upcoming nursery expansions.

To enhance seedling growth and survival, a vermicompost system was installed in the Ala Nursery. So far, vermicomposting worm cultivation has been limited due to exposure to sunlight and disturbances from unwanted insects. Four kilograms of worms were initially distributed across 40 lined boxes, however, this number was reduced to 1.5 kg due to these challenges. In June 2025, SEED constructed shading for the worm boxes and installed a protective net to support the goal of quadrupling worm mass within four months. Once that target is reached, a portion of the worms will be transferred to specialised composting beds, constructed in July 2025, to scale up production to meet the annual target of 10,000 kilograms of worm compost. Since implementing these improvements, worm health and productivity have improved significantly, bringing SEED closer to meeting its target. To date, 302 kilograms of vermicompost have been produced, the application of which, will be trialled on five native seedling species in the nursery over the coming months.

Figure 3 – Corridor 3 in July 2025, Acacia bent by Cyclone Jude can be seen in the midground.

2.1.2 Corridor Management

During the 2025 planting season, the Ala Programme planted 6,490 native seedlings across Corridors 1, 3, 4, 5, and the corridor expansions. This represents 95% of the 2024 total wherein 6,850 native seedlings were planted, a significant accomplishment, especially given the substantial delays caused by the January 2025 fire. Notably, the fire severely damaged areas of remnant forest adjoining the corridors. In response, SEED aims to expand certain corridors to connect with unaffected, healthy sections of forest to reestablish their viability as traversable lemur habitat. As part of this fire recovery strategy, 310 natives were planted in May 2025 in a newly acquired expansion of Corridor 5. SEED is closely monitoring this corridor expansion to evaluate the success of seedlings grown on open ground and the viability of corridor expansions as a fire remediation tactic (see section '5.2 Planting on Open Ground').

To encourage ecological succession and support seedling growth, 49% of corridor Acacia (n=2,872) were ringbarked in 2024 and felled in early 2025. Ringbarking is an effective method of killing highly adaptable trees, such as Acacia, that involves removing a strip of bark around the tree trunk to prevent the transport of nutrients and water from the leaves to the roots. This thinning was carried out due to concerns that the Acacia trees were competing with native seedlings in the corridors, preventing them from maturing and replacing the Acacia. The ringbarking was done in a selective grid pattern to avoid compromising the effectiveness of the corridors as lemur habitat.

2.1.3 Forest Threats

One of the greatest threats to the corridors is fire, driven by a long dry season from July to November, increasingly unpredictable climate patterns, and the traditional technique of clearing land with fire for agricultural purposes known as *tavy*. This year, the fire season lasted until January 2025 due to exceptionally dry conditions and a delayed start to the rainy season. The January 2025 fire, driven by record dry conditions and high winds, breached a 15m firebreak and crossed wetland areas previously believed to be natural barriers, causing significant damage to the corridors. Following the fire, SEED met with 10 community fire agents, re-recruited and trained during the Ala Programme Phase II, to discuss the previous fire season and better understand how to prevent future fires.

Ahead of the 2025 fire season, SEED held a meeting with *zebu* (Malagasy for Cattle) herders in April 2025 to discuss encroachment into the corridors. This discussion focused on the role herders play in starting fires and aimed to raise awareness about the damaging impact of *zebu* grazing on young seedlings. Furthermore, in June 2025, SEED led workshops in eight partner communities bordering the SLLF to initiate discussions and introduce the idea of developing *dinas* (local laws) to regulate the use of fire. These workshops served as a starting point for the communities to take ownership of creating and implementing the *dinas* themselves. The communities showed strong interest and SEED plans to follow up on this process during the 2025 fire season, hoping that these locally developed laws will lead to improved fire management in and around the SLLF.

In June and July 2025, SEED cleared all current corridor firebreaks and plans to purchase both additional firebreaks and expand existing ones in August 2025. This year's fire has shown the importance of clearing large firebreaks and building up multiple lines of defence against fire. Community support is an essential part of SEED's fire mitigation strategy. Ahead of the 2025 fire season, SEED visited all partner communities to assess the condition of previously distributed fire mitigation equipment, re-recruit and train fire agents.

2.1.4 Monitoring

SEED has been actively monitoring native seedling growth and ecological conditions across the corridors to track restoration progress. Following disturbances from the January fire and March cyclone, monitoring resumed in April 2025 with new quadrats established in Corridors 1, 3, 4, and 5. Early results show strong seedling establishment, with average condition scores above 3.5 on a four-point scale (see section '4. Monitoring, Evaluation, and Learning' for further details).

2.2 Outcome Two: Community Resource Needs

In July 2024, the Ala Programme finalised a Community Forest Resource Usage Report, which details the findings of 13 months of community resource use surveys, 90 household surveys, nine logger surveys, and six focus groups. The report maps out patterns of forest resource use, identifies key species harvested, and highlights the central role forest products play in supporting livelihoods in Sainte Luce. These findings have shaped SEED's reforestation strategy under the Ala Programme and helped define conservation priorities that support both biodiversity and community wellbeing.

A key outcome of the Programme's Phase III is to share the findings of the Community Forest Resource Usage Report with relevant actors, such as QIT Minerals Madagascar (QMM), a mining company jointly owned by the Rio Tinto corporation and the Malagasy government. Furthermore, the SCRP team has built an interactive online map that displays protected areas, resource use patterns, and ecological data in Sainte Luce. The map is currently not publicly available because of the proprietary data it contains.

Progress on this outcome was delayed due to the urgent need to respond to the January 2025 fire. SEED now plans to begin disseminating the findings of the Community Forest Resource Usage Report with relevant stakeholders, including QMM and the Sainte Luce community, at the beginning of the second year of Phase III.

The aim is to align inter-organisational conservation priorities toward the benefit of the Sainte Luce community. To support this, the online interactive map is expected to play a key role in communicating SEED's research findings and conservation priorities in Sainte Luce.

2.3 Outcome Three: Forest Management

A key outcome of the Ala Programme Phase III is to build local capacity to ensure long-term protection of the SLLF. SEED has worked towards this by providing training to key actors and convening collaborative forest management meetings. Of particular importance are the corridor landowners, who hold an ancestral claim to the land where the forest corridors are established.

2.3.1 Corridor Landowners

In March and April 2025, SEED conducted two training sessions with corridor landowners to strengthen their forest management skills, introducing new forestry and quadrat monitoring techniques. In addition, 12 participants, including the landowners and some of their household partners, are enrolled in SEED's financial literacy course, which will run until September 2025. The course covers basic skills such as spending, budgeting, saving, and investing, and attendance has been strong so far, averaging 83.3% for both men and women. Participants have shown strong engagement, initiating a group savings scheme that commits each member to a monthly contribution. The group's average monthly savings per household was 26,006 MGA (approx. 4.50 GBP) from April to June 2025 and by the end of June, all participants had collectively saved 505,000 MGA (approx. 84.30 GBP). SEED collects the savings monthly and will distribute the first payout in January 2026 as participants requested for this timing to align with the lean season. By encouraging saving, SEED hopes to strengthen the participants' long-term financial resilience.

"The course on financial literacy has made me more confident in making financial decisions."

Joarison, Corridor Landowner, July 2025

2.3.2 Forest Management Structures

In addition, SEED has supported broader collaboration by organising meetings with key actors focused on shared forest management challenges. The SLLF is collaboratively managed by a number of governmental, local, corporate, and informal bodies with overlapping jurisdictions and responsibilities. In 2025, SEED facilitated two meetings which brought together more than 50 representatives from eight communities bordering the littoral forest, including local leaders and members of three local forest management bodies. At the meetings, participants described their responsibilities, discussed grievances with other management bodies, and debated solutions to new issues. These forums are contributing to building trust, enhancing transparency, and promoting cooperative planning for conservation in Sainte Luce.

2.4 Outcome Four: Understanding Biodiversity

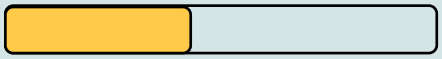
SEED has maintained robust ecological monitoring throughout the Programme's Phase III to track project progress and contribute to broader scientific understanding of biodiversity in the SLLF and Ala corridors. Between the 1st of February and the 31st of July 2025, SEED completed 32 surveys focused on herpetofauna, invertebrate biodiversity, and ecological succession. Findings from these surveys are discussed in greater detail in the Ala Phase III - Technical Report 2025.[10] Additionally, motion-activated camera traps continue to record the presence and movement of lemurs in the corridors. Despite major disruptions caused by the January 2025 fire and subsequent tropical storm, the SCRP team has carried out all planned surveys. This research underpins an upcoming scientific paper evaluating the Ala Programme's corridor-based conservation strategy. While the impact of recent environmental disturbances on data quality is still being assessed, SEED remains committed to disseminating the key findings from Phase III and contributing to the broader conservation science dialogue.

3. Activity Progress

Complete or in progress and on track	In progress with slight challenges	In progress with serious challenges

1.1.1 Improve and maintain nursery structures	To be completed in Ala III: Year 2
1.1.2 Collect and prepare native seeds and seedlings	On track, will expand in Year 2
1.1.3 Trial degradable pots to improve native seedling resilience	Completed in Year 1
1.1.4 Install a vermicomposting system and train staff	Completed in Year 1
1.1.4.1 Collect vermicompost inputs	Delayed
1.1.5 Collect and bag vermicompost	Delayed
1.2.1 Replant native seedlings	6,490 planted
1.2.2 Corridor maintenance	On track
1.2.3 Provide seedling aftercare	On track
1.2.4 Thin Acacia	49% of Acacia ringbarked
1.3.1 Clear corridor firebreaks	Cleared for Year 1
1.3.2 Clear S8 firebreak	Delayed until the start of Year 2
1.3.3 Meet with fire agents	On track

1.3.3.1 Train fire agents	 On track
1.3.3.2 Assess fire equipment in each community	 Assessed for Year 1
1.3.3.3 Distribute new fire equipment as required	 Distributed for Year 1
1.3.4 Fire mass mobilisations	 On track
1.3.5 Engage with zebu herders	 On track
1.4.1 Monitor and evaluate new nursery techniques	 On track
1.4.2 Monitor native species survival and growth	 On track
1.4.3 Conduct learnings with reforestation organisations and specialists	 Delayed slightly
2.1.1 Disseminate knowledge on community resource usage and needs	 On track - Interactive Map created
2.1.2 Advocate for community resource needs with key stakeholders	 Delayed until the start of Year 2
3.1.1 Landowner corridor management training	 On track
3.1.2 Include landowners in corridor monitoring	 On track
3.1.3 Financial literacy training with landowners	 On track
3.1.4 Support landowners to produce a sales and usage plan for Acacia products	 On track
3.2.1 Facilitate meetings between DREDD and local forest management structures	 On track

3.2.2 Facilitate meetings between local forest management structures	 On track
3.3.1 Promote forests through community-led environmental awareness raising	 Delayed slightly
3.3.2 Engage with Miaro	 Ceased due to low group motivation
3.3.3 Engage with DREDD	 On track
3.3.4 Engage with QMM	 On track
4.1.1 Camera trap lemur monitoring	 On track
4.1.2 VES Herpetofauna surveys	 On track
4.1.3 Catch and release invertebrate surveys	 On track
4.1.4 Botanical surveys	 On track
4.1.5 Write and submit one scientific paper by the end of Phase III	 On track – will begin in Year 2

4. Monitoring, Evaluation, and Learning

SEED closely monitors the corridors to better understand native seedling growth, survival and the general ecological conditions. In April and May 2025, new quadrats were established in Corridors 1, 3, 4, and 5 to facilitate resumed monitoring after the fire and Tropical Storm. As of July 2025, the average seedling condition in Corridors 1, 3, 4, and 5 exceeded 3.5 on a four-point scale, indicating strong establishment after planting. Additionally, a quadrat was set up in the Corridor 5 expansion to monitor the progress of the trial. Since planting, four out of the five species planted in the expansion have shown growth under both shade and no shade, with an average condition rating above 3.3 on a four-point scale. By the end of July, all corridor monitoring had been prepared for digital data collection using KoboToolbox surveying software, ensuring that Phase III Year 2 would begin with streamlined and accurate monitoring. Furthermore, since June 2025, monitoring in the nursery has increased to track the species and quantity of seedlings. Weekly meetings are held alongside monitoring sessions to coordinate nursery activities between nursery staff, the SCRP team, and the Ala programme team. Moving ahead, SEED will continue regular monitoring of the corridors and nursery to evaluate progress, guide future restoration efforts, and address any emerging challenges.

Figure 4 – Three Brown Collared Lemurs captured in Corridor 3 by a motion-activated camera in February, an encouraging sign following the fire.

5. Challenges and Key Learnings

5.1 Tropical Storm Jude

In March 2025, Tropical Storm Jude, the strongest storm to hit the region since 1970, was the first recorded cyclone to traverse the entirety of southern Madagascar. While traversing southern Madagascar, Cyclone Jude lost momentum and was downgraded to a severe tropical storm by the time it hit the Anosy region, yet it still struck with significant force. Strong winds toppled 379 Acacia trees across the corridors. Corridor 3, which had fared best during the January 2025 fire, suffered the greatest losses, with 274 Acacia downed in the high winds. Corridor 4 lost 76 trees, and Corridor 1 lost 27. Corridors 2 and 5 sustained relatively little damage because of the wind direction and the Acacia's lack of leaves, as they were the corridors most affected by the fire.

The impact of the tropical storm was particularly severe as it came just two months after the January fire, compounding damage to the forest corridors and further disrupting their function as traversable lemur habitat. The quick succession of these successive events has highlighted the acute pressure that climate change is placing on southern Madagascar.

The cyclone's arrival partway through the planting season delayed activities in the corridors, as fallen Acacia presented hazards for both people and wildlife. In response, SEED collaborated with the corridor landowners to remove fallen and unstable trees, recreating safe conditions for implementation activities and opening space for replanting. Additional native seedlings were collected and placed in the nursery, then later planted according to the adapted planting plan, which prioritised the areas most affected by the cyclone.

Beyond increasing planting capacity, few preventative steps can be taken to mitigate the damage of future cyclones. Cyclone Jude was of unusual intensity, and cyclones are less frequent in southern Madagascar compared to coastal regions in the North. Madagascar, however, is among the top ten countries that are most vulnerable to the effects of climate change.[11] The first 12 months of Ala Phase III have marked a challenging year of climate shocks and unfortunately, the incidence of such events is only anticipated to increase as the impact of climate change continues to grow more severe.

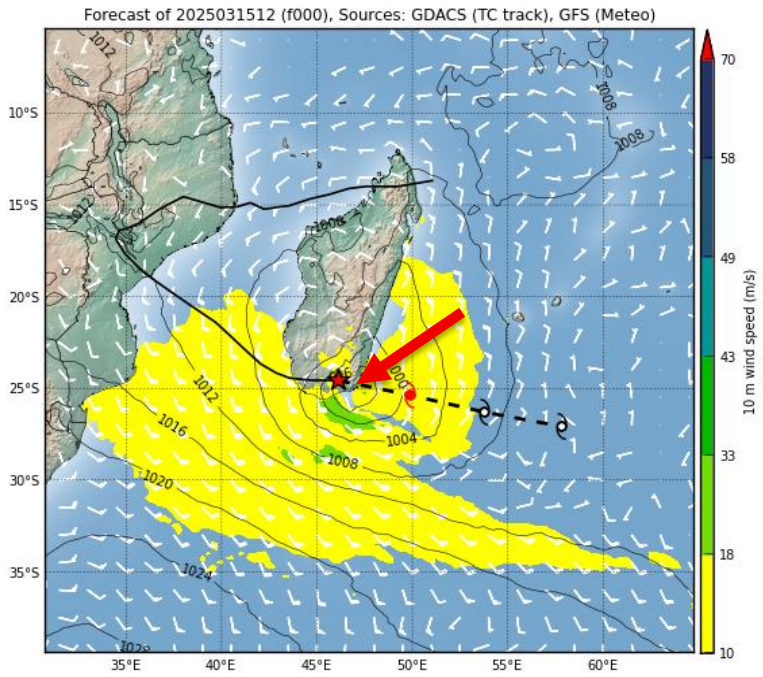


Figure 2 – A map of Cyclone Jude's path showing its position, marked by the red star, on March 15th at 12 pm. The position of the Ala corridors is marked with the red arrow. The storm directly struck Sainte Luce with significant force.

Image from GDACS

5.2 Planting on Open Ground

In previous phases of the Ala Programme, the team focused on planting native seedlings in close proximity to existing Acacia. SEED chose to initially establish the corridors with Acacia because it is fast-growing, tolerates Sainte Luce's nutrient-depleted soils, and adds nitrogen to the soil. This approach has been highly successful in establishing functional corridors that have enabled lemur movement within just five years. Acacia was understood as a prime "nurse tree" in that it creates beneficial shade and soil conditions to foster the growth of less resilient native seedlings. Native seedlings were planted to facilitate ecological succession, the process in which pioneer species (fast-growing, short-lived trees) are gradually replaced by mature forest species (slow-growing, long-lived trees). Over time, SEED planned to selectively thin the Acacia while supporting native growth so the tree composition of the corridors mirrors that of mature adjoining forests.

Figure 5 – The newly planted Corridor 5 expansion, showing the shade structures that are being tested for their effectiveness.

As the Ala Programme has progressed, issues with Acacia as nurse trees have become more apparent, prompting a recalibration of the native seedling planting approach. Immature Acacia exerts strong competitive pressure on natives, often overwhelming the benefits of shade and soil enrichment. In late 2024, 49% of corridor Acacia (n=2,872) were selectively thinned with ringbarking to create a more suitable environment for native seedling growth. This process was carefully executed to retain connectivity in the corridors so that arboreal lemurs could effectively use them for inter-fragment travel. The January fire and March storm, however, have reduced corridor connectivity more than would otherwise be expected due to this thinning.

In 2025, as part of fire recovery and strategy recalibration, SEED began trialling the planting of native seedlings on open ground. In May, 310 seedlings were planted in an expansion to Corridor 5, testing both open ground planting and the approach of extending corridors to restore connectivity with healthy sections of forest after the fire damaged areas of remnant forest adjoining the corridors. Seedlings from five different native species were planted, with half being equipped with simple shade devices in the established monitoring quadrat. SEED is closely monitoring these seedlings to evaluate their growth, condition, and the effectiveness of shade devices. Although newly planted, the seedlings are showing highly promising growth and condition rates, evincing a strong competitive effect on corridor-planted natives. Results from the trial will inform the strategy for the upcoming planting season, including the possible prioritisation of open ground planting.

5.3 Tree Species Specificity

In line with a revised approach to avoid planting native seedlings in close proximity to Acacia, the Ala Nursery's seedling collector, has been working closely with the rest of the team to ensure the nursery is stocked with tree species best suited to the new planting conditions. Tree species have varying tolerances for shade and forest conditions. For instance, late-successional species (slow-growing, long-lived trees) thrive in shady, mature forests, while pioneer species are typically fast-growing, sun-loving, and adapted to harsh, open conditions. Previously, this specificity was less critical when planting within corridors, as Acacia was assumed to create favourable growing conditions for multiple successional types. With the shift in planting strategy, prioritising the collection and planting of pioneer species is especially important going forward.

Figure 6 – The Ala Nursery's seedling collector, collecting wild seedlings in the forest.

Although research on successional types of littoral forest trees in Madagascar is limited, SEED has taken proactive steps to identify suitable native species. The Missouri Botanical Garden, which runs reforestation projects under conditions similar to Sainte Luce at its Agnalazaha site, generously shared valuable information on tree species that have thrived there. Furthermore, The Ala Nursery's seedling collector, who possesses intimate knowledge of Sainte Luce's forests, has collaborated closely with the SCRP team to identify additional target species. In July 2025, the SCRP team conducted a survey of firebreaks in SLLF fragment S8 to see what native trees were growing on these recently cleared areas. Drawing on this combined knowledge, SEED is confident the Ala Nursery will be stocked with tree species that are ideally suited for upcoming plantings.

6. Next Steps

An upcoming focus of the Ala Programme is to maintain native seedlings in the nursery and corridors through the dry season. Fortunately, frequent rains in June and July 2025 have delayed and may slightly shorten the dry season, which typically ends in December. In August 2025, SEED will begin watering and manure application as needed to support the approximately 7,000 natives through the driest months of the year.

In response to the January 2025 fire and in preparation for the upcoming fire season, SEED has decided to purchase additional corridor firebreaks and expand existing ones to ensure that each forest corridor is protected on both sides by a 10m firebreak. Purchasing and clearance will take place from August to September 2025. To clear the S8 firebreak that surrounds the entire forest fragment, SEED collaborates with FIMPIA (Forestry Police Association), which is supported and financed by QMM. FIMPIA is responsible for overseeing certain forest fragments, specifically S8, S9, and S17, which QMM has declared as Protected Areas as part of its ecological mitigation commitments. While coordination regarding the S8 firebreak clearance is ongoing, activities are anticipated to begin in early September 2025.

As part of the fire recovery plan, the Ala Programme has begun expanding the nursery's capacity from 12,000 to 44,000 seedlings, with activities set to continue over the coming four to five months. This expansion involves constructing 18 new seedling beds, including five raised beds. The raised beds, built one metre above ground, will allow seedlings to mature longer in the nursery as their roots will be air-pruned. Air pruning supports the development of strong root balls, supporting better outcomes once seedlings are planted in the field. Construction of the new beds is planned to take place between August and September 2025. Additionally, as part of the nursery expansion, SEED has started the monthly collection of 5,500 wild native seedlings, which will continue until the planting season begins in December 2025/January 2026. Looking ahead to the next planting season, the Ala team is developing a strategy to optimally deploy the 40,000+ seedlings expected to fill the nursery by the rainy season onset. Through collaboration with external experts and the incorporation of local knowledge, SEED is confident that the Programme will emerge more resilient and effective in response to the climate pressures experienced in Phase III Year 1.

Alongside these core activities, SEED will disseminate the findings of the Programme's Community Forest Resource Usage Report to key actors, including QMM and partner communities, to improve understanding of community resource needs. The Programme will continue delivering forest management training to corridor landowners while completing financial literacy training to build local capacity. Multi-stakeholder meetings will be facilitated on an ongoing basis to enhance collaboration and address emerging forest management challenges. Monitoring activities will continue across the corridors, collecting data on native seedling condition and growth, including insights from the newly established trial in the Corridor 5 expansion. Ecological monitoring will also be maintained to contribute to organisational and international understanding of biodiversity within the corridors and the SLLF. Finally, SEED will scale up vermicompost production and trial its application on selected native seedling species in the nursery.

7. Conclusion

The first 12 months of Ala Phase III have yielded significant progress in the face of severe environmental challenges. Late 2024 saw key milestones met for the Ala Programme, with lemurs recorded in the corridors for the first time. Despite setbacks from the drought, fire, and cyclone, the Ala team maintained momentum, adapting activities to ensure the Programme is progressing towards conservation goals. Through continued research, trialling, and leveraging local knowledge, SEED has improved operational effectiveness, paving the way for enhanced project implementation.

Reforestation and endangered species conservation require a long-term commitment, measured in years and decades rather than weeks or months. While recent shocks have tested recovery capacity, the Ala Programme continues to address the urgent conservation goal of reducing lemur habitat fragmentation. Ultimately, the challenges of this year have guided the Ala Programme toward a more resilient future.

8. Phase III – Year I: Key Figures

- Since October 2024, *Endangered lemurs have been recorded using the corridors on three separate occasions,* demonstrating the viability of the corridors as a conservation tool.
- A total of *6,490 native seedlings have been planted* across Corridors 1, 3, 4, and 5.
- A total of *49% of corridor Acacia trees were ring-barked and felled* (n=2,872) to reduce competition with native seedlings and facilitate ecological succession.
- A *vermicomposting system was* installed in the Ala Nursery with 40 boxes and two worm beds constructed for worm cultivation, and six staff members were trained to manage the system and produce compost sustainably. So far, 302 kilograms of vermicompost have been produced.
- A total of 12 training sessions were held to strengthen the forest management capacity and financial literacy of the eight corridor landowners.
- SEED facilitated four meetings, including one attended by the Regional Environment Ministry, bringing together more than 50 representatives from eight communities bordering the Sainte Luce littoral forest. Meetings encouraged collaboration for forest management activities.

9. References

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