

Phase 2:

Essential Upgrades & Research Centre Establishment (2028/30)

1. Introduction

Total Required: \$40,000

This document outlines the budget for Phase 2:

Essential Upgrades (Operational Readiness) for the establishment of a world-class palm academy and research centre in South Africa. The total budget for this phase is \$40,000, allocated equally between foundational infrastructure upgrades and the establishment of a dedicated research centre. This balanced approach ensures that the academy will not only be operationally ready to host students and administrative staff but will also possess the core research capabilities required to become a centre of excellence in palm horticulture and science from its inception.

2. Total Budget Allocation

The total budget of \$40,000 is allocated as follows:

Category	Allocation Percentage	
Building Setup & Operational Readiness	\$20,000	50%
Research Centre Establishment	\$20,000	50%
Total	\$40,000	100%

3. Building Setup & Operational Readiness (\$20,000)

This portion of the budget is dedicated to the structural and functional upgrades of the existing buildings to ensure they are fit for purpose. The allocation prioritizes creating a safe, welcoming, and efficient environment for education and administration.

Building	Area (m ²)	Key Activities	Allocated Budget
Building One (Classrooms)	157.7	Structural repairs, painting, flooring, and basic furniture.	\$10,000

Building Two (Administration)	134.0	Office setup with partitions, desks, IT infrastructure, and security.	\$7,000
Building Three (Lab Conversion)	27.79	Conversion into a small research space with basic utilities.	\$3,000
Total	319.49		\$20,000

Outcome

Upon completion, the academy will have an administrative hub for governance and outreach, fully equipped classrooms ready for immediate training programs, and a foundational laboratory space. This ensures the academy is functional and capable of hosting students, workshops, and initial research activities, securing its operational viability.

4. Research Centre Establishment (\$20,000)

This budget is allocated to equip the research centre with the necessary tools and technology to conduct world-class research in palm science. The focus is on establishing core capabilities in plant science, horticulture, and data analysis.

Category	Description	Estimated Cost
Basic Laboratory Equipment	Microscopes, pH meters, soil testing kits, autoclave, refrigerator, and a basic biosafety cabinet.	\$8,000
Horticultural & Propagation Tools	Small-scale growth chamber, propagation trays, irrigation system, and specialized horticultural hand tools.	\$5,000
IT & Data Management	High-performance computer for data analysis, research software licenses, and a data backup system.	\$4,000
Initial Supplies & Consumables	Laboratory glassware, chemicals, reagents, and an initial stock of diverse palm seeds and germplasm.	\$3,000
Total		\$20,000

Outcome

This investment will establish a fully functional research laboratory that supports the palm nursery and enables initial research activities. It provides the foundation for the

academy to develop a reputation for scientific excellence, attract research talent, and contribute meaningfully to the advancement of palm science in South Africa and beyond.