

## **5-Year Business Plan: Development of a Sustainable *Mimosa pudica* Processing Unit for the Production and Commercialization of Value-Added Products (MIMOPRO-project)**

### **Summary**

The FUTO MIMOPRO-project is a ₦49.7M initiative funded by NASENI to establish a production and demonstration facility that converts the invasive weed *Mimosa pudica* (MP) into three core product lines:

**Animal feed additives and feedstuff (WP1):** Processed bioash, nano-activated charcoal, and fermented MP (FMP) for poultry and pigs production.

**Bio-fertilizers (WP2):** Nano-biochar, bokashi organic manure, and spent mushroom compost.

**Edible mushrooms (WP2):** *Pleurotus tuber-regium*.

The project is structured for a 2-year development and launch phase (as shown in the work plan), followed by a projected 3-year commercialization and growth phase. By Year 5, the MIMOPRO is projected to be a self-sustaining, revenue-generating unit of FUTO, with franchised operations, significant market share in the region, and a proven model for circular agriculture.

### **Year 1-2: The Project Phase (Investment & Setup)**

This phase is fully covered by the proposed budget and work plan. The focus is on the capital expenditure (CapEx), R&D, and achieving milestones.

**Primary goal:** Prove technology viability, validate product efficacy, and establish initial production capacity.

### **Key Activities**

- Infrastructure setup (shed, fencing, repurposing)
- Procurement and installation of all equipments
- Conduct baseline survey, animal trials, and field trials
- Obtain necessary certifications (NAFDAC, SON)
- Initiate pilot sales and market testing

### **Financial Focus**

**Capital Expenditure (CapEx):** ₦21.5M (Equipment + Infrastructure from WP1&2).

**Operational Expenditure (OpEx):** ₦28.2M (Personnel, materials, testing, surveys, commercialization activities).

**Funding:** Seek grants funding from NASENI, and university in kind contributions.

### **Success Metrics**

- Milestones achieved on time (Site ready, prototypes, validated products, certifications)
- Positive results from animal and field trials
- Successful pilot sales and positive farmer feedback

### **Year 3: The Launch Phase (Commercial Ramp-Up)**

This phase will begin after project closure, and will focus on transitioning from pilot to full commercial production and sales.

**Primary goal:** Achieve operational break-even and establish a reliable customer base.

### **Revenue Streams**

1. **Product Sales:** Direct sales of feed additives, feedstuff, bio-fertilizers, and mushrooms
2. **Services:** Soil testing, custom feed formulation, technical advisory services
3. **Training:** Hosting paid farmer field schools and workshops

### **Marketing Strategy**

- Leverage exhibition contacts from Years 1-2
- Develop a dealer network with agro-input stores
- Targeted digital marketing (WhatsApp, Facebook) for local farmers
- Offer bulk discounts to cooperatives

### **Financial Projections**

- **Revenue:** Focus on volume. Target ~~₦10~~ - ~~₦15~~M from product and service sales
- **Costs:** High operational and utility costs. Personnel costs stabilize
- **Profit/Loss:** Aim to cover all operational costs (break-even). Reinvest any profit

### **Year 4: The Growth Phase (Scale & Expand)**

With a proven product-market fit, the MIMOPRO project is expected to scale operations and expand its reach

**Primary goal:** Increase production capacity, expand product lines, and grow market share

### **Key Activities**

- **Scale production:** Invest in a larger kiln/fermenters based on demand
- **Product development:** Launch new product variants (e.g., feed for fish, ruminants), biofuel and industrial fibre
- **Geographic expansion:** Use the initial 5-state survey to target distributors in Abia, Anambra, Enugu and Ebonyi
- **Formalize SME partnerships:** Execute the technology transfer to 5 SMEs as planned

### **Financial Projections**

- **Revenue:** Significant growth (~~₦25~~ - ~~₦40~~M) from expanded capacity and market
- **Costs:** Economies of scale reduce cost per unit, while marketing costs may increase
- **Profit:** Projected to become profitable this year, generating a net margin

### **Year 5: The Maturity Phase (Sustainability & Franchising)**

The project is now an established business, focusing on long-term sustainability and impact replication.

**Primary goal:** Solidify the brand, maximize profit, and replicate the model through franchising

### **Key Activities**

- **Franchising:** Package the business model (tech, training, brand) for sale to entrepreneurs ("Franchise Trials" from the Year 1-2 plan)
- **Brand building:** Become a recognized brand in the southeastern zone
- **Optimization:** Continuous process improvement to reduce costs and improve quality
- **Policy advocacy:** Use policy briefs from WP3 to engage government on waste-to-wealth initiatives

### **Financial Projections**

- **Revenue:** Diversified streams: product sales (₦50M+), franchise fees, training fees
- **Profitability:** Strong net profits enable further R&D and expansion
- **Valuation:** The project becomes a valuable asset for FUTO, with a replicable, profitable model

### **Financial Analysis & Projections**

\*Based on provided ~~₦49.7~~M budget for Years 1-2.\*

## **1. Key Assumptions for Years 3-5**

- Market acceptance grows steadily after successful trials
- Production capacity increases by 50% in Year 4 and 100% in Year 5
- Franchising operations begin generating fees in Year 5
- Operational costs are managed efficiently with scale

## 2. Simplified 5-Year Financial Forecast

Category	Year 1-2	Year 3	Year 4	Year 5
Revenue	(Pilot Sales)	₦ 12,000,000	₦ 30,000,000	₦ 55,000,000
Cost of Goods Sold (COGS)	(Included in Budget)	₦ 8,000,000	₦ 15,000,000	₦ 25,000,000
Operating Expenses	(As per Budget)	₦ 5,000,000	₦ 8,000,000	₦ 12,000,000
Net Profit/(Loss)	(₦ 49,712,500)	(₦ 1,000,000)	₦ 7,000,000	₦ 18,000,000
Cumulative Cash Flow	(₦ 49,712,500)	(₦ 50,712,500)	(₦ 43,712,500)	(₦ 25,712,500)

\*Note: Years 1-2 show the total investment as a loss. Year 3 aims for near breakeven. The project is expected to fully pay back the initial investment and become cumulatively cash flow positive shortly after Year 5.\*

## 3. Funding Request & Use of Funds

The sum of **₦49,712,500** is being requested as research grant from NASENI and will be used strictly as detailed in the budget table to cover all CapEx and OpEx requirements for the 2-year project phase, ensuring all milestones are met and the project is set up for commercial success.

## 4. Exit/Sustainability Strategy

The intended outcome is not to "exit" but to create a sustainable revenue stream for FUTO. The MIMOPRO project will operate as a semi-autonomous commercial unit within the university, funding its own operations, contributing to research, and serving as a living laboratory for students, while fulfilling its core mission of agricultural development.