

BUSINESS PROPOSAL
ON
THE COMMERCIALIZATION OF ZO~BOX (AN AUTOMATED
ZOBO DRINK MAKING MACHINE)



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Executive Summary

This proposal outlines the commercialization plan for Zo~BoX (an automated zobo drink making machine), a patented Nigerian innovation developed from academic research. The machine automates the entire process of producing zobo, a popular indigenous beverage made from the calyces of *Hibiscus sabdariffa*. By ensuring standardization, hygiene, and efficiency, the machine positions zobo as a competitive beverage that meets both local and international quality standards. The project aims to transform the innovation into a scalable product that creates jobs, empowers SMEs, reduces reliance on imports, and contributes to economic diversification in Nigeria.

Introduction

Zobo is one of Nigeria's most consumed indigenous beverages, but its production is largely manual, labor-intensive, and inconsistent in quality. Issues of hygiene, contamination, and poor scalability hinder its acceptance among elite consumers and in global markets. In addition, manual processing exposes producers to risks such as hot liquid scalding and other injuries, making the process not only inefficient but also unsafe. This project introduces an automated solution that addresses these limitations. The machine has been successfully prototyped, published in scientific literature, and patented in Nigeria, providing a strong foundation for commercialization.

Objectives

1. To commercialize a patented automated zobo drink making machine for wide-scale adoption.
2. To enhance the integrity, hygiene, and standardization of zobo production, making it more acceptable to elite and international consumers.
3. To empower entrepreneurs and SMEs with affordable technology that reduces labour costs and increases production capacity.
4. To promote agro-based industrialization and economic diversification through value addition to *Hibiscus sabdariffa*.
5. To establish Nigeria as a hub for indigenous food processing technology with export potential.

4. Market Analysis

4.1 Target Market

- **Primary Market:** SMEs, food vendors, beverage entrepreneurs, and cooperatives in Nigeria and West Africa.
- **Secondary Market:** Hotels, restaurants, catering services, supermarkets, and export-oriented beverage companies.
- **Tertiary Market:** Households and individuals seeking high-quality homemade zobo with minimal labor.

4.2 Market Potential

- Zobo drink is consumed by millions across Nigeria and is expanding into diaspora markets.
- Increasing health awareness is shifting consumer preference from carbonated drinks to natural beverages.
- Elite consumers and international markets demand hygienic, standardized production, which this machine guarantees.

4.3 Competitive Advantage

- First patented Nigerian innovation in automated zobo production.
- Affordable compared to imported beverage processing machines.
- Enhance credibility and consumer confidence, particularly among elite buyers.

5. Product Description

The automated zobo drink making machine is designed to simplify and standardize the entire production process. The operator adds the ingredients, including water, into the system, after which boiling and extraction occur at preset temperatures. A built-in stirrer ensures uniform mixing throughout the process. The machine is programmed to automatically shut off once the operation is complete, enhancing both safety and efficiency. Sieving and filtration are integrated into the system, guaranteeing a hygienic, consistent, and high-quality zobo drink. The finished product is conveniently discharged through a tap located at the base of the system, ready for packaging or consumption.

Key Features:

- **Stainless steel and food-grade construction** for durability, hygiene, and compliance with food safety standards.
- **Integrated stirrer** to ensure uniform mixing of ingredients.
- **Built-in sieve and filtration system** for smooth, high-quality output.
- **Smart sensors** to regulate process efficiency and safety.
- **User-friendly temperature control** for precise boiling and extraction.

- **Discharge tap at the base** for safe, hygienic, and convenient collection of the finished product.

Expected Benefits

To the Economy:

- Job creation in fabrication, distribution, maintenance, and beverage enterprises.
- Increased patronage of local agricultural produce (*Hibiscus sabdariffa*).
- Reduced importation of food processing equipment.
- Export potential for both the machine and packaged zobo drink.

To Consumers:

- Consistent, hygienic, and high-quality zobo production.
- Increased confidence among elite consumers and global markets.
- A healthier alternative to sugary carbonated drinks.

To Operators/Zobo Producers:

- Simplified, automated process that saves time and labour.
- Reduced risk of burns, scalds, or injuries from manual boiling and handling.
- Lower production costs due to energy-efficient operation.
- Higher output capacity, enabling producers to scale from household to SME or industrial levels.
- Improved product integrity, helping producers attract more customers and premium markets.

Business Model

• **Revenue Streams:**

- Direct sales of machines to SMEs and industries.
- Leasing options for small-scale businesses.
- Technical training and after-sales services.
- Licensing of the technology for mass production.

• **Pricing Strategy:**

- Competitive pricing to make machines affordable for SMEs while sustaining profitability.
- Tiered models (basic, premium, industrial) to serve different markets.

Implementation Plan

1. **Phase I – Prototype Refinement:** Adapt the patented prototype into commercial models (6–12 months).
2. **Phase II – Pilot Testing:** Deploy machines to SMEs and food vendors for real-market validation.
3. **Phase III – Mass Production:** Partner with local manufacturers to produce machines at scale.
4. **Phase IV – Market Expansion:** Distribute nationwide and explore export opportunities in West Africa and beyond.

Financial Projections (Indicative)

- **Initial Investment:** Equipment design, fabrication setup, marketing, and distribution (~₦50–75 million).
- **Projected Sales (Year 1):** 500 units (average ₦500,000/unit) = ₦250 million revenue.
- **Net Profit Margin:** Estimated 25–30% after costs.
- **Break-Even Point:** Within 2 years of commercialization.

Risk Analysis and Mitigation

- **Risk:** Low adoption due to unfamiliarity.
 - *Mitigation:* Demonstrations, awareness campaigns, and leasing options.
- **Risk:** Competition from imported equipment.
 - *Mitigation:* Lower cost, patent protection, and cultural branding.
- **Risk:** Supply chain issues for raw materials.
 - *Mitigation:* Partnering with hibiscus farmer cooperatives for steady supply.

11. Conclusion

The automated zobo drink making machine is a transformative, patented Nigerian innovation with strong commercialization potential. By combining technology, entrepreneurship, and local resources, it addresses key challenges in beverage production such as standardization, hygiene, scalability, and consumer confidence. Its commercialization will empower SMEs, create jobs, reduce imports, enhance Nigeria's industrial competitiveness, and support the nation's agenda for economic diversification and food security.