

PROJECT PROFILES



**PRODUCTS DERIVED
FROM
HIBISCUS (ROSELLE)**

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ROSELLE-FLAVOURED SOFT DRINK

INTRODUCTION

The Roselle soft drink business focuses on producing a refreshing beverage made from dried Roselle calyx. This natural drink, rich in vitamins and antioxidants, offers a healthy alternative to sugary sodas. The product is available in various flavors and can be packaged in eco-friendly bottles, appealing to health-conscious consumers. With increasing awareness of health benefits and a growing demand for natural beverages, this project aims to capture a significant market share in Katsina State and its surroundings.

MARKETING POTENTIAL

The demand for healthy and natural beverages is on the rise in Katsina State and neighbouring regions. With a population increasingly inclined towards wellness, the Roselle soft drink caters to health-conscious individuals and families seeking nutritious options. The beverage can be marketed through local markets, supermarkets, and online platforms, making it accessible to a wider audience. Additionally, the increasing trend of health awareness campaigns and the popularity of organic products further enhance the market potential, indicating a promising opportunity for business growth.

BASIS & PRESUMPTIONS

- **Market Demand:** It is presumed that there will be a consistent demand for natural and health-oriented beverages in Katsina State and its neighbouring regions, driven by a growing health-conscious consumer base.
- **Supply Chain Stability:** Reliable access to high-quality dried Roselle calyx from local farmers is essential for maintaining consistent production quality.
- **Regulatory Compliance:** Timely acquisition of necessary regulatory approvals and health certifications is expected to enable smooth operational startup.
- **Financial Viability:** Sufficient funding, including assistance from banks or state corporations, is presumed to cover both fixed and working capital needs.
- **Operational Efficiency:** The scheme is based on 85% efficiency, 8 hrs. a day for 300 days a year. Also, the time period required to achieve full capacity utilization is possibly 4-5 years.

IMPLEMENTATION SCHEDULE

Planning and Feasibility Study	Month 1-2
Company Registration	Month 2

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Regulatory Approvals	Month 2
Site Selection & Construction	Month 3-5
Appointment of Staff	Month 6
Power Installation & Connection	Month 7
Machinery Procurement & Installation	Month 7-9
Raw Material Sourcing	Month 8
Production Trial Runs	Month 9
Marketing & Launch	Month 10
Ongoing Operations	Month 11 onwards

MANUFACTURING PROCESS

The production begins with the procurement of fresh Roselle calyces, which are thoroughly washed to remove dirt and potential contaminants. These calyces are then boiled in stainless-steel extraction tanks with 10,000 liters of water for 30 minutes to extract a concentrated essence. For each monthly production of 17,000 liters (approximately 850 liters per day over 20 production days), 255 kg of Roselle and 1.41 kg (1,410 grams) of sucralose are required. The extract is filtered and blended with sucralose and citric acid, ensuring proper dissolution at a maintained temperature of 85°C for 15 minutes. The mixture undergoes pasteurization for microbial safety and is cooled to 25°C before moving to the bottling phase. The beverage is bottled using an automated filling machine, sealed, labeled, and stored under controlled conditions to maintain quality. Each batch is checked for consistency in taste and adherence to food safety standards.

PRODUCTION CAPACITY

Annual Quantity	204,000 Liters
Value	163,200,000.00 NGN (based on 800 NGN per liter as selling price)

ROSELLE-FLAVOURED SOFT DRINK

FINANCIAL ASPECTS

Fixed Capital

Item Description	Cost (₱)
Lease for production space	5,000,000.00
Extraction equipment	3,500,000.00
Bottling and sealing machines	6,000,000.00
Storage tanks	2,500,000.00
Furniture and fittings	500,000.00
Installation and setup	5,000,000.00
80kVA Diesel Generator	20,000,000.00
Total Fixed Capital	42,500,000.00

Workers' Salaries

Position (w/ population)	Monthly Cost (₱)
Manager (1)	250,000.00
Production Supervisor (1)	175,000.00
Sales Supervisor (1)	175,000.00
Accountant (1)	200,000.00
Clerk (1)	100,000.00

ROSELLE-FLAVOURED SOFT DRINK

Machine operators (4)	400,000.00
Quality control staff (2)	300,000.00
Technician (1)	150,000.00
Security Guards (2)	160,000.00
Total Salaries (per month)	1,910,000.00

Raw Materials (per month)

Material	Rate (₦)	Total Cost (₦)
Roselle calyces (255kg)	1,100.00	280,500.00
Sucralose (1.41kg)	2,280.00	3,214.80
Citric acid (5.1kg)	2,400.00	12,240.00
PET bottles (17,000 bottles)	80.00	1,360,000.00
Labels (17,000 labels)	20.00	340,000.00
Total Raw Materials		1,995,954.80

Utilities (per month)

Utility	Rate (₦)	Cost (₦)
Electricity (7700kWh)	85.00	655,000.00
Diesel (2000L)	1,200.00	2,400,000.00
Total Utilities		3,055,000.00

ROSELLE-FLAVOURED SOFT DRINK

Other Expenses (per month)

Expense	Cost (NGN)
Marketing and distribution	400,000.00
Maintenance	200,000.00
Miscellaneous	200,000.00
Total Other Expenses	800,000.00

Total Recurrent Expenses

Expense	Cost (NGN)
Workers' Salaries	1,910,000.00
Raw Materials	1,995,954.80
Utilities	3,055,000.00
Other Expenses	800,000.00
Total (per month)	7,760,954.80
Total (per annum)	93,131,457.60

Revenue (per annum)

Item	Quantity	Rate (NGN)	Cost (NGN)
Roselle Soft Drink in 1L PET bottle	204,000 bottles	800.00	163,200,000.00

Net Profit (before tax)

Total Recurrent Expenses	93,131,457.60 NGN
Revenue	163,200,000.00 NGN
Net Profit	70,068,542.40 NGN

ROSELLE-FLAVOURED SOFT DRINK

CONCLUSION

The Roselle-flavored soft drink project presents a strong opportunity for sustainable profitability and market growth in Katsina State and beyond. This venture taps into the rising consumer preference for health-conscious and natural beverage options, providing a refreshing alternative to sugary sodas. By leveraging the nutritional benefits of Roselle, the product appeals to a wide audience, including health-conscious individuals, families, and wellness enthusiasts. The detailed production setup, which ensures high-quality and consistent taste, combined with strategic marketing efforts, positions the business to establish a significant market presence. Additionally, this project contributes to the local economy by sourcing raw materials from regional farmers and creating employment opportunities in production, quality assurance, and distribution. With the potential to generate substantial profit margins and scale operations in the future, this business is well-suited to meet the increasing demand for premium natural beverages in both local and regional markets.

HERBAL TEA

INTRODUCTION

This project focuses on the small-scale production of packaged herbal tea from Roselle calyces, an increasingly popular beverage known for its health benefits. The business aims to tap into the market for natural, health-oriented products by providing an affordable, locally produced option. The product will be marketed as a natural, caffeine-free tea with a tart, fruity flavour, rich in antioxidants and vitamins.

MARKET POTENTIAL

There is significant demand for herbal tea products in Katsina State and surrounding northern regions due to rising health consciousness and preferences for traditional beverages. Roselle tea, known locally as "zobo," is popular for its health benefits, including boosting immunity and reducing blood pressure. The market also benefits from an increasing number of health stores, tea shops, and supermarkets that stock herbal products, creating a solid base for distribution.

BASIS & PRESUMPTIONS

- Work 6 hours per day, 20 days a month, for a period of 6 months.
- Utilization of manual and semi-automated packaging equipment to manage startup costs.
- Production capacity of approximately 15,000 tea packets per month.
- Assumed consistent demand due to health awareness and a shift toward natural products.
- Streamlined regulatory approvals for food safety and compliance.
- Presumed stable utility costs and raw material availability.
- Efficient use of local distribution channels for cost-effective market reach.

IMPLEMENTATION SCHEDULE

Milestone	Duration (Weeks)
Business registration	2
Regulatory approvals	3
Procurement of equipment	3
Setup of production facility	4
Recruitment and training	2
Production trials	1

HERBAL TEA

Market launch	1
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MANUFACTURING PROCESS

The production process begins with sourcing high-quality Roselle calyces, which are thoroughly cleaned to remove any debris. The cleaned calyces are then sun-dried for optimal preservation and packed in controlled storage to maintain quality. To prepare the tea for packaging, the dried Roselle is ground into fine particles using a commercial herb grinder with a capacity of 10 kg per hour. The ground Roselle is then sifted to achieve a uniform texture. Next, precise amounts (3 grams) are measured using a digital weighing scale to ensure consistent product quality.

The measured portions are transferred to a semi-automated tea bag-filling machine capable of producing 30 tea bags per minute. Each tea bag is sealed using a heat-sealing system and then placed into branded paper envelopes. A compact cartoning machine is used to pack the filled tea bags into 25 bags per box for retail distribution. Finished products are inspected for quality assurance and stored in a temperature-controlled space to preserve freshness until distribution.

PRODUCTION CAPACITY

Annual Quantity	6,000 Boxes of 25 Tea Bags each
Value	27,000,000.00 NGN (based on 4,500 NGN per box as selling price)

FINANCIAL ASPECTS

Fixed Capital

Item Description	Cost (NGN)
Lease for production space	2,500,000.00
Herb grinder	1,000,000.00
Semi-automated Tea bag-filling machine	2,500,000.00
Heat-sealing system	500,000.00

HERBAL TEA

Cartoning machine	1,500,000.00
Storage shelves	300,000.00
Furniture and fittings	200,000.00
Installation and setup	200,000.00
Total Fixed Capital	8,700,000.00

Workers' Salaries

Position (w/ population)	Monthly Cost (₱)
Machine Operators (2)	140,000.00
Quality Control Staff (1)	75,000.00
Security Guard	70,000.00
Total Salaries	285,000.00

Raw Materials (per month)

Material	Rate (₱)	Total Cost (₱)
Roselle calyces (90kg)	1,100.00	99,000.00
Packaging Materials (Bags + Boxes + Labels)	350,000.00	350,000.00
Total Raw Materials		440,000.00

HERBAL TEA

Utilities (per month)

Utility	Rate (₦)	Cost (₦)
Electricity (500kWh)	85.00	42,500.00
Diesel (100L)	1,200.00	120,000.00
Total Utilities		162,500.00

Other Expenses (per month)

Expense	Cost (NGN)
Marketing and distribution	100,000.00
Maintenance	100,000.00
Miscellaneous	50,000.00
Total Other Expenses	250,000.00

Total Recurrent Expenses

Expense	Cost (NGN)
Workers' Salaries	250,000.00
Raw Materials	440,000.00
Utilities	162,500.00
Other Expenses	250,000.00
Total (per month)	1,137,500.00
Total - 6 months production + Security (for remaining 6 months)	7,245,000.00

HERBAL TEA

Revenue

Item	Quantity	Rate (NGN)	Cost (NGN)
Roselle Herbal Tea (180,000 bags)	6,000 boxes	4,500.00	27,000,000.00

Net profit (before tax)

Total Recurrent Expenses	7,245,000.00 NGN
Revenue	27,000,000.00 NGN
Net Profit	19,755,000.00 NGN

CONCLUSION

The small-scale herbal tea production project exemplifies a lucrative opportunity to cater to the growing demand for natural, caffeine-free beverages. By utilizing locally sourced Roselle calyces, the business not only ensures cost-effective production but also supports local farmers and promotes regional agriculture. The popularity of herbal teas, driven by rising health awareness, provides a stable market foundation for the product. The detailed manufacturing process guarantees consistency and quality, essential factors for building consumer trust and loyalty. Furthermore, the scalable nature of the business allows for gradual expansion into wider markets, including health stores, supermarkets, and online retail platforms. This project has the potential to generate a steady revenue stream while contributing to the promotion of healthier lifestyles. Overall, the venture is an excellent example of small-scale entrepreneurship that blends traditional practices with modern business strategies for long-term success.

HAIR MASKS

INTRODUCTION

This project entails the production of hair masks using Roselle as the primary ingredient. Roselle is rich in antioxidants and vitamins that promote healthy hair, making it an ideal component for natural hair care products. The hair masks will cater to consumers looking for affordable, effective, and chemical-free solutions for hair nourishment and repair. The business aims to serve a growing niche in the beauty and personal care market in Katsina and surrounding areas.

MARKET POTENTIAL

The demand for natural and organic hair care products has been rising in Katsina and neighboring states due to increased awareness of the benefits of herbal-based solutions. Consumers are shifting towards products that are free from harsh chemicals and use locally sourced ingredients. This trend provides a strong market opportunity for Roselle-based hair masks. The product will target both local retail outlets and beauty salons, leveraging the rising popularity of natural hair treatments.

BASIS & PRESUMPTIONS

- Work 6 hours per day, 20 days a month, for a period of 6 months.
- Production capacity of approximately 5,000 hair mask jars per month.
- Assumed steady demand due to consumer preference for natural and herbal hair products.
- Basic regulatory compliance assumed through local cosmetic safety certifications.
- Presumed stable utility costs and access to affordable packaging materials.
- Lean workforce structure focusing on production, quality control, and packaging staff.

IMPLEMENTATION SCHEDULE

Milestone	Duration (Weeks)
Business registration	2
Regulatory approvals	3
Procurement of equipment	3
Setup of production facility	4
Recruitment and training	2
Production trials	1

HAIR MASKS

Market launch	1
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MANUFACTURING PROCESS

Production begins with the collection and cleaning of Roselle calyces to remove any impurities. The clean calyces are dried in a controlled environment to preserve their nutritional properties. The dried Roselle is then ground into a fine powder using a commercial herb grinder with a capacity of 10 kg per hour. For a batch to produce approximately 1000 jars (250 ml each):

- **Roselle powder:** 5 kg.
- **Carrier oils (e.g., coconut or argan oil):** 125 liters to ensure the correct consistency and smooth application.
- **Shea butter:** 25 kg, added to enrich the hair mask with moisturizing properties.
- **Essential oils:** 2.5 Liters for fragrance and added hair benefits.

The mixture of Roselle powder, carrier oils, and unrefined shea butter is placed in a mixing and blending machine with a capacity to handle up to 50 liters per batch. The mixture is gently heated and continuously blended for uniform distribution. Essential oils are added toward the end of the heating process to preserve their properties. After blending, the mixture is cooled and transferred to a semi-automatic filling machine that dispenses 250 ml per jar.

The jars are sealed using an automatic sealing machine and labeled with product information. A final quality check is conducted to ensure that each jar meets quality standards before packaging and storage.

PRODUCTION CAPACITY

Annual Quantity	60,000 Jars of 250ml each
Value	60,000,000.00 NGN (based on 1,000 NGN per jar as selling price)

FINANCIAL ASPECTS

Fixed Capital

Item Description	Cost (NGN)
Lease for production space	2,500,000.00

HAIR MASKS

Herb grinder	1,000,000.00
Mixing and blending machine	1,500,000.00
Filling and sealing machine	2,500,000.00
Labeling machine	1,200,000.00
Storage containers	1,500,000.00
Furniture and fittings	800,000.00
Installation and setup	1,800,000.00
Total Fixed Capital	12,800,000.00

Workers' Salaries

Position (w/ population)	Monthly Cost (₱)
Machine Operators (2)	140,000.00
Quality Control Staff (1)	75,000.00
Security Guard	70,000.00
Total Salaries	285,000.00

Raw Materials (per month)

Material	Rate (₱)	Total Cost (₱)
Roselle calyces (25kg)	1,100.00	27,500.00
Carrier Oils (625 Liters)	1,500.00	937,500.00
Shea Butter (125 kg)	3,500.00	437,500.00
Essential Oils (12.5 Liters)	10,000.00	125,000.00

HAIR MASKS

Packaging Materials (5,000 pcs)	350.00	1,750,000.00
Total Raw Materials		3,277,500.00

Utilities (per month)

Utility	Rate (₦)	Cost (₦)
Electricity (2500kWh)	85.00	212,500.00
Diesel (2000L)	1,200.00	2,400,000.00
Total Utilities		2,612,500.00

Other Expenses (per month)

Expense	Cost (NGN)
Marketing and distribution	150,000.00
Maintenance	100,000.00
Miscellaneous	100,000.00
Total Other Expenses	350,000.00

Total Recurrent Expenses

Expense	Cost (NGN)
Workers' Salaries	285,000.00
Raw Materials	3,277,500.00
Utilities	2,612,500.00
Other Expenses	350,000.00
Total (per month)	6,525,000.00

HAIR MASKS

Total (per annum)	78,300,000.00
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Revenue

Item	Quantity	Rate (NGN)	Cost (NGN)
Roselle Hair Masks (250ml Jars)	60,000 jars	3,500.00	210,000,000.00

Net profit (before tax)

Total Recurrent Expenses	78,300,000.00 NGN
Revenue	210,000,000.00 NGN
Net Profit	131,700,000.00 NGN

CONCLUSION

The Roselle-based hair mask production project represents a unique and innovative approach to leveraging the natural properties of Roselle in the beauty and personal care industry. With rising demand for organic and herbal hair care products, this business aligns perfectly with consumer preferences for chemical-free solutions that promote hair health. The use of locally available raw materials, such as Roselle calyces, carrier oils, and shea butter, ensures both cost efficiency and product authenticity. The project not only addresses a growing niche in the personal care market but also supports local farmers and fosters regional economic growth. By maintaining stringent quality standards and implementing effective marketing strategies, the business can capture a significant share of the beauty market. The strong profit margins and scalability of the venture make it a highly attractive investment. This project underscores the potential of integrating natural ingredients with innovative product development to meet modern consumer demands.