

Business Plan for Antimicrobial Product Development from *Acacia nilotica* Plant: Preclinical Studies and Product Filing.

Executive Summary

The alarming rise of multi-drug resistant (MDR) bacterial infections has become a formidable challenge in modern medicine, particularly in the treatment of upper and lower respiratory tract infections. Conventional antibiotics are increasingly losing efficacy, prompting an urgent need for novel therapeutic agents with potent antimicrobial properties. Among promising natural sources, the *Acacia* plant stands out due to its rich phytochemical profile and long-standing use in traditional medicine. Various species of *Acacia* have demonstrated significant antibacterial activity, attributed to bioactive phytochemicals such as tannins, flavonoids, and alkaloids. Harnessing these compounds for drug development offers a sustainable and potentially effective strategy to combat MDR pathogens. **Product Description:** Roselle Plus is a granulated, leachable tea bag product designed for cold or hot water brewing. Our proprietary processing ensures fast solubility and maximum stability.

Mission Statement for Developing of Alternative antimicrobial product:

To develop an alternative antimicrobial product to resistant bacteria from *Acacia nilotica* plant by 2027.

Objectives

- i. **Scale Up Production:** Optimize small-scale processing to pilot commercial scale production.
- ii. **Quality Control:** Determine and validate quality control stability protocols in line with international standards.
- iii. **Trademark and Regulatory Compliance:** Trademark Roselle Plus and list with NAFDAC.
- iv. **Commercial Distribution:** Scale up production for commercial distribution and evaluate market dynamics.
- v. **Market Positioning:** Establish Roselle Plus as a high-quality commodity for trade.

Market Analysis

- a. **Target Market:** All Nigerians, including adults and children, requiring treatment for resistant bacteria to orthodox medicine.
- b. **Distribution Channels:** Pharmacies across the 36 states.
- c. **Pricing:** Considering the present monetary value and positive inclined projection a cost of N1000.00 per pack at retail level and N850 per pack for distributors.
- d. **Projected Sales:** An estimated sales of 10 million packs per year and a relative profit of N5 billion net profit.
- e. **At current pricing of raw material:** A N5 Million worth of materials is projected to produce finished product worth N10 Million worth finished product.

International Market

- a. **Export Goal:** We wish to achieve \$5 billion in annual sales after five years, through full-scale production and global distribution.

Conclusion

Alternative antimicrobial product from a potent herbal medicine will serve as a valuable tool to combat antimicrobial resistant organisms globally. With a strong business plan in place, we are confident in our ability to achieve our objectives and become a leading brand in the herbal product industry.