



## **Ternatural Bluem Sip and Bites**

**Authors:** Axel Neo B. Alcasid, Bea Bettina T. Balido, John Cedric E. Borero, Jan Florimar, Kaye C. Cabague, Angel R. Caicтен, Arianne Faye O. Conda, Jefferson S. Haresco, Princess Jemica M. Mico, Jeff Mico Molenilla, Beatriz N. Quito, Pauline Kate E. Vial  
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**Research Adviser:** Virginia V. Papas

### **ABSTRACT**

*Market demand analysis, supply analysis, pricing strategy, and financial analysis are all considered in this feasibility study, which examines the viability of Ternatural Purple Bluem, a company that focuses on producing bread and drinks infused with herbal flowers such as blue Clitoria ternatea, also known as the "butterfly pea" and "blue ternate flower." Based on the survey conducted among the pupils of Camp Vicente Lim Integrated School, there is a substantial demand for locally flavored products, which makes the market potential of the company viable.*

*With an income statement showing a net profit of P6,789.67 for January 2026, the financial analysis indicated profitability. Production and operational strategies were created to ensure efficiency. However, the income statement included labor wages, highlighting the need for effective marketing methods and a slight price adjustment to boost sales. The study found that Ternatural Purple Bluem is a promising business opportunity. It innovates by using herbal flowers to make pastries and beverages instead of herbal supplement capsules, syrup, and tablets, resulting in a unique and profitable product.*

**KEYWORDS:** *herbal, market potential, unique innovation, pastry, beverages*

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## **I. INTRODUCTION**

The blue Clitoria ternate flower can be called the butterfly pea flower for its appearance. This flower is not just appealing for its color but also for its health benefits. The color of its flower is called “teratins,” which is a natural pigment that gives vibrant color while acting as antioxidants that protect the body from harmful free radicals. Because of this, it is now being used to make food and drinks both healthier and more visually appealing (Oguis et al., 2019).

The proposed products in this study are simple yet innovative treats: bread made with butterfly pea flower (Clitoria ternatea), combined with delicious fillings such as sweet potato, ube, and chocolate, along with a refreshing drink infused with lemon and butterfly pea flower. These products are not only flavorful but also carry health benefits. The butterfly pea flower has been recognized for its natural properties that may help fight inflammation, obesity, and harmful microbes. Rich in anthocyanins, it also helps the body reduce oxidative stress, making it a nutritious and functional ingredient that adds both color and wellness to everyday food.

In addition to bread, herbal drinks have been explored for their health-promoting properties. Butterfly pea flower combined with lemon is particularly notable because it contains flavonoids and anthocyanins with potential anti-obesity effects.

According to Anugrahani et al. (2025), an herbal drink for obesity management was developed and evaluated for acceptability, microbiological safety, nutritional content, and phytochemical profile. The study found that such beverages can be both functional and appealing to consumers, as confirmed by organoleptic testing.

Herbal foods are commonly consumed in the form of capsules, tablets, or juice. This study explores their incorporation into pastries, specifically bread, allowing consumers to enjoy a familiar snack while still gaining health benefits. Previous research has shown that adding functional plant-based ingredients to bread can enhance its nutritional value without compromising sensory qualities. The study by Fatima et al. (2023) reported that incorporating 5% malunggay leaf powder into bread significantly improved its nutritional profile while maintaining acceptable taste, texture, and aroma. This supports the idea that bread fortified with natural ingredients, like butterfly pea flower, can be a practical way to promote healthier food options.

Food plays a big part in keeping us healthy, especially in preventing diseases that are becoming more common worldwide. For teenagers, the eating habits they develop now can have a lasting effect on their health. Choosing healthy foods at a young age not only helps them stay active and energized today but also lowers their chances of developing heart disease and other serious illnesses as they grow older.

Nowadays, finding budget-friendly yet nutritious meals is no longer an issue, as combo meals are not only offered by restaurants and fast-food chains but also available in school canteens and cafeterias. These establishments offer a variety of combo meal options, such as a simple steak



paired with a common side dish, soup, and dessert, which can be both creative and appealing for students.

Combo meals in the modern food business have become an important tool for increasing sales. Many fast-food companies in Chandigarh have succeeded by pairing their products at affordable prices with other hot-selling products. Modern fast-food chains and restaurants are trendsetters that have introduced value-based combos by offering customers choices.

### **Vision Statement**

To become the leading provider of vibrant and health-focused blue ternate-infused bread and drinks, bringing natural wellness and color to every Filipino home starting from the classrooms of Camp Vicente Lim Integrated School and expanding across Calamba and beyond." The Blue ternate Bread and Drinks aspire to be the top choice for unique and nutritious products made with blue ternate flowers in the Philippines. The company envisions establishing itself as a symbol of natural innovation, wellness, and local ingredient pride.

### **Mission Statement**

To provide refreshing and nourishing blue ternate-infused bread and drinks that inspire healthy living and celebrate local flavors. This company is committed to using natural, locally grown ingredients to create delightful products that uplift the body, brighten the day, and support Filipino farmers and communities.

### **Core Values**

These core values represent the guiding principles and beliefs that the enterprise holds important. This reflects the company's commitment to providing balanced, nourishing, and innovative products while supporting local communities and respecting the environment.

**B – Balance.** The enterprise upholds the harmony between flavor and nourishment by offering wholesome yet gratifying butterfly pea-inspired snacks and beverages, thoughtfully crafted for individuals of all ages.

**L – Local Pride.** The business takes pride in using homegrown ingredients like blue ternate and aims to support Filipino farmers and help local communities grow.

**U – Uniqueness.** By creating unique food and beverage options that show the adaptability of blue ternate, the company will promise creativity and originality.

**E – Earthy.** By using natural and local source ingredients that support local farmers and respect the environment.

### **Objectives**

This working Project Feasibility Study (PFS) is intended to evaluate the feasibility of selling “YakiYume.” Specifically, it aimed to evaluate and analyze the following areas:

#### **1. The Technical Aspect of the Study**



- Product Description
- Product Process
- Equipment/Materials
- Plant Allocation
- Plant Layout

### **2. The Marketing Aspect of the Study**

- General Business Conditions
- Competitive Condition
- Target Market
- Demand
- Product
- Pricing Strategy
- Promotion
- Packaging

### **3. The Financing Aspect of the Study**

- Capitalization
- Source of Funds
- Total Sales
- Total Expenses
- Income Statement (5 years projected)
- Balance Sheet (5 years projected)
- Cash Flows Statement (5 years projected)
- Return On Investment
- Ratio Analysis

### **4. The Management Aspect of the Study**

- Form of Ownership
- Structure
- Job Analysis
- Company Analysis

### **5. The Socioeconomic Aspect of the Study**

- Contribution to the Government
- Contribution to the Society

## **II. METHODOLOGY**

Ternatural Bluem Sip and Bites determined the sample size required for the market using the Raosoft Sample Size Calculator. There are 4071 students in grades seven (7) through twelve (12) make up the entire population. The researchers provided the Raosoft calculator with certain inputs, including the predicted response rate (50%), the margin of error (5%), and the confidence level (95%). The sample size collected for this case is 352 respondents. The selected sample size enables Ternatural Bluem Sip and Bites to obtain essential and significant market insights across grade levels and use the information gathered to inform decision-making in conducting this working Project Feasibility Study (PFS).



### III. RESULT

This section presents the financial aspect of the business and evaluates its viability and sustainability. Prior to actual operations, a 10-day business simulation was conducted to gather financial data, which served as the basis for projections ranging from 1 to 5 years. Included in this portion are the estimated projected costs, projected income statement, and relevant financial ratios derived from the simulation results. These are used to assess the business's profitability, financial stability, and ability to provide reasonable returns to the partners.

**Table 1.** Average Net Income per Day

Particulars	Total	Averages
<b>SALES</b>		
Kamote Bites	₱ 2,700.00	₱ 270.00
Ube Bites	8,820.00	882.00
Choco Bites	10,740.00	1,074.00
Bluem Juice	4,176.00	417.60
Add Ons	40.00	4.00
Combo juice+bread	690.00	69.00
Combo 3pcs	2,415.00	241.50
<b>NET SALES</b>	<b>₱ 29,581.00</b>	<b>₱ 2,958.10</b>
Less: Cost of Goods Sold	7,927.68	792.77
<b>GROSS PROFIT</b>	<b>₱ 21,653.32</b>	<b>₱ 2,165.33</b>
Less: Operating Expenses		
Supplies Expense	1,571.65	157.17
Utilities Expense	300.00	30.00
Transportation Expense	192.00	19.20
Salaries Expense	10,800.00	1,080.00
Rent Expense	2,000.00	200.00
Total Operating Expense	14,863.65	1,299.20
<b>NET INCOME</b>	<b>₱ 6,789.67</b>	<b>₱ 866.13</b>

The table shows the totals and averages with profit and expenses for the period of January 14-29, 2026. The business posted total net sales of ₱29,581.00, with an average daily sales amount of ₱2,958.10, mainly driven by the strong sales of Choco Bites and Ube Bites. The cost of goods sold totaled ₱7,927.68, resulting in a gross profit of ₱21,653.32, or ₱2,165.33 per day. Operating expenses totaled ₱14,863.65, with salaries and rent accounting for the largest share. The business realized a total net income of ₱6,789.67, equivalent to an average of ₱866.13 per day, demonstrating consistent daily profitability.



**Table 2.** Return on Investment

Year	Net Income	Project Cost	ROI %
1	204,340.34	48,365.10	422.50
2	214,557.36	48,365.10	443.62
3	377,033.33	48,365.10	779.56
4	236,549.49	48,365.10	489.09
5	248,376.97	48,365.10	513.55

The table shows the return on investments of the Ternatural PurpleBluem in five years. There will be the net income per year: 161,100.55 (Year 1), 169,155.58 (Year 2), 177,613.36 (Year 3), 186,494.03 (Year 4), and 195,819.73 (Year 5), with the projected cost of 48,365.10 per year. In five years, the Return On Investment (ROI) per year will be 333.09 (Year 1), 349.75 (Year 2), 367.23 (Year 3), 385.60 (Year 4), and 404.88 (Year 5).

**Table 3.** Payback Period

Year	Cash Sales	Capital Recovery	Payback Period In Years
1	204,340.34	48,365.10	0.24
2	214,557.36		
3	377,033.33		
4	236,549.49		
5	248,376.97		
Total		48,365.10	<u>0.24</u>
Payback Period (in years)			

This table shows the payback period in five years, having cash sales per year of 161,100.55 (Year 1), 169,155.58 (Year 2), 177,613.36 (Year 3), 186,494.03 (Year 4), and 195,818.73 (Year 5), with a capital recovery of 48,365.10 and a payback period of 0.30.

#### IV. DISCUSSION

Results show that the business venture Ternatural PurpleBluem has the potential to be successful in the school setting. It has little to no competition, high student interest, and affordable prices. The product offerings of spending habits and buying behavior of the 352 students who participated in the market survey. The supply aspect of the competitors was also studied through surveys and interviews. The aspects studied included the physical layout of the competitors, equipment used, manpower needed, production processes, ingredients used, and quality control processes. The financial aspect covered income statements, profitability estimates, and expected expenses. Data analysis was done to determine the supply, demand, and revenue estimates. Bluem Bites and Bluem Juice provide a nutritious food option for the students with a distinctive taste. With proper planning and effective marketing strategies, problems such as the aversion of the



students to kamote fillings and price rivalry with other brands can be overcome. Ternatural PurpleBluem is a competent business venture that will give the students a delicious and nutritious treat while providing the researchers with valuable experience in the field of business.

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