

## A feasibility study on dried Indian mango production business in San Jose, Occidental Mindoro

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### ***Abstract***

This feasibility study examines the potential for launching a small-scale dried Indian mango business in San Jose, Occidental Mindoro. The project is designed to provide a healthy, locally sourced snack while supporting mango farmers, reducing post-harvest losses, and creating income opportunities. The study reviews market demand, startup and operating costs, production feasibility, and socio-economic impact. San Jose, with its population of over 150,000 and strong transport connections, offers an ideal setting for the venture. Survey results from OMECO and LBP employees show that 99% are willing to buy the product, most preferring two to three packs, and more than half are ready to pay above ₱40. Based on a conservative 10% market share, Production is planned at about 200 pouches per day using food-grade dehydrators. The initial investment is ₱312,711.38, with two staff members employed under regional wage standards. Financial projections indicate 10% annual output growth, periodic price adjustments, and a shift from 3% OPT to VAT registration by the fourth year. Profitability is strong, with gross profit ratios ranging from 54% to 56% and net margins rising from 11% to 25% over five years. Overall, the study presents a practical, community-oriented business model that leverages local resources, meets consumer demand, and contributes to rural development in Occidental Mindoro.

***Keywords:*** dried Indian mango, small-scale agribusiness, local value addition, locally sourced snack, production feasibility

## A feasibility study on dried Indian mango production business in San Jose, Occidental Mindoro

### 1. Introduction

San Jose, Occidental Mindoro, is recognized as a thriving agricultural municipality with fertile lands and diverse crop production (PhilAtlas, 2020). Mango is among its most abundant fruits, recognized as a staple in Filipino households and celebrated as a symbol of tropical abundance. Local trade fairs and community reports consistently highlight mango as one of the area's standout products (Philippine Information Agency, 2025; CARD MRI, 2025). The Indian mango variety, locally grown and widely appreciated for its tangy-sweet flavor, firm texture, and high fiber content, is especially common in backyard farms and small orchards throughout the province. Its widespread presence reflects both the richness of local agriculture and the cultural importance of mangoes in the community.

Despite its popularity, a significant portion of mango harvests in San Jose goes to waste during peak seasons due to limited postharvest infrastructure, preservation methods, and market saturation (CARD MRI, 2025). According to the Philippine Mango Industry Roadmap 2021–2025, mango is still one of the country's top crops, with Guimaras, Pangasinan, and Zambales leading in production. According to the Department of Agriculture (2021), additional mango processing and value-added projects are needed to reduce waste and help farmers earn more. Antolin and Malanon (2024) also note that postharvest losses are often due to poor handling and limited facilities. These problems are also seen in Occidental Mindoro.

Dried mango is a popular export from the Philippines, valued for its long shelf life, convenience, and natural sweetness. However, most production happens in larger provinces and is led by big companies. Small producers in Occidental Mindoro have not yet fully capitalized on this market. The Training Manual on Mango Production in the Philippines stresses the importance of proper harvesting, handling, and drying to maintain fruit quality (CropLife Philippines, n.d.). Improper harvesting and transport often bruise mangoes, reducing their quality and market appeal. This shows the need for local value-added solutions, such as drying (Galvan, 2020).

More Filipinos are becoming health-conscious, which has increased demand for natural and minimally processed foods (Department of Health [DOH], 2024; Statista, 2025). Mangoes are rich in vitamins A and C, antioxidants, and fiber, so dried mango is a healthier choice than sugary or salty snacks (Food and Nutrition Research Institute [FNRI], 2024). This shift is clear in schools, offices, and homes throughout Occidental Mindoro. Dried mango production also has a big impact on local communities. By purchasing mangoes directly from farmers in San Jose and nearby towns such as Rizal, Magsaysay, and Calintaan, businesses can establish a steady supply chain and support local farmers. The MangoTayo! study from Davao del Sur State College (DSSC) highlights that, despite a decline in national mango production from 2000 to 2020, there is a growing interest in sustainable farming that includes small farmers in the value chain. These approaches help rural communities grow and benefit from agriculture-based businesses.

San Jose's climate, with its clear wet and dry seasons, is well-suited for growing mangoes. By using modern drying technology and clean processing methods, the area can become a local center for dried mango production. This effort also supports national goals to grow agriculture businesses, cut food waste, and help rural areas develop. This feasibility study explores the technical, financial, and market viability of establishing a dried Indian mango enterprise in San Jose. It aims to provide a roadmap for transforming an abundant local resource into a high-value product that meets modern consumer demands while uplifting the local economy and promoting healthier lifestyles among Mindoreños.

**Objectives of the Study** - The study aims to assess the feasibility and market potential of producing and selling

dried Indian mango with a twist in San Jose, Occidental Mindoro, by examining consumer acceptance and purchase intent, evaluating market demand in San Jose and nearby areas, and calculating the startup capital and operational costs required for the enterprise. It further seeks to identify the most suitable location for production and distribution while promoting sustainability in local mango farming through reduced postharvest waste. Finally, the study intends to evaluate the socio-economic benefits of the enterprise, including job creation and income opportunities for farmers, thereby contributing to community development and rural economic growth.

**Significance of the Study** - This feasibility study on dried Indian mango production in San Jose, Occidental Mindoro, is significant because it provides practical insights and benefits for consumers, farmers, small enterprises, and the local government. It introduces a healthy, locally produced snack that meets rising demand for natural foods, reduces postharvest waste, stabilizes farmer income, and supports community-based agribusiness opportunities. The findings also inform rural enterprise development and promote the use of local materials and traditional farming skills, strengthening community pride and sustainability. Finally, the study offers a foundation for academic and industry research on product development, supply chains, and consumer preferences, contributing to more resilient rural food systems.

**Scope and Delimitation of the Study** - This study evaluates the feasibility of producing and marketing dried Indian mango with a twist in San Jose, Occidental Mindoro. It covers key areas, including market demand, production techniques, financial viability, and socio-economic impact. The research aims to determine whether a small-scale dried mango enterprise can thrive in the local setting by utilizing surplus mango harvests and introducing a value-added product to the community. The study gathered information through structured surveys with local mango growers and potential customers. It also considers potential buyers, including school and office canteens, pasalubong centers, and local stores. Although the main focus is on San Jose, the research also uses information from nearby towns, such as Rizal, Magsaysay, and Calintaan, to gain a deeper understanding of how mangoes are grown and sold in the region. This study focuses on simple mango-drying methods suitable for small businesses, rather than for large factories or export processes. The financial review examines the costs of starting and running the business, as well as the expected profits in the first few years. Marketing plans are based on how local people purchase products and the methods used to sell goods in the area. The projections and analyses in this study cover five years from 2026 to 2030, with 2025 serving as the baseline year for computations. This time frame was chosen to give a realistic picture of both short-term viability and long-term sustainability. This research does not cover large commercial production, international markets, or advanced food preservation methods. It mentions outside factors, such as changes in climate, national trade rules, and long-term farming policies, but does not study them in detail.

**Sources of data** - This study utilized both primary and secondary data to assess the feasibility of producing dried Indian mango with a twist in San Jose, Occidental Mindoro. Primary data were obtained through structured surveys, which provided firsthand insights into mango production capacity and consumer preferences. Respondents included local mango farmers from Barangays Camburay, Central, San Isidro, and Mapaya, as well as employees of LBP and OMECO. Secondary data were gathered from published materials, including agricultural manuals, feasibility studies, academic journals, and government reports. These sources supported the technical and financial analysis of mango processing, including production methods, cost requirements, and agribusiness market trends.

**Ethical Considerations** - The researcher adhered to ethical standards throughout this feasibility study, handling data responsibly and respecting all individuals involved. Information from surveys was used solely for academic purposes and aligned with the study's objectives. Participation was voluntary, and respondents were aware that they could decline at any time without any negative consequences. Before data collection, informed consent was obtained from individuals involved, including mango growers and institutional employees. The researcher ensured that all responses were kept confidential and securely stored, with no personal data shared beyond the scope of the research. To maintain academic integrity, all secondary sources, including published studies, reference materials, and government reports, were properly cited in accordance with APA 7th edition

guidelines. The researcher also adhered to the Data Privacy Act of 2012 (RA 10173), ensuring that the study was transparent, respectful, and accountable at every stage.

## **2. Methodology**

This study employed a descriptive quantitative research design to assess the practicality and market potential of producing dried Indian mango with a twist in San Jose, Occidental Mindoro. Data were collected exclusively through structured survey questionnaires targeting two key groups: local mango growers and selected employees of the Land Bank of the Philippines (LBP) and Occidental Mindoro Electric Cooperative (OMECO), who represent the potential consumer market.

Convenience sampling was used to select participants who were easily accessible and had relevant experience or purchasing habits. Mango growers from the barangays of Camburay, Central, San Isidro, and Mapaya in San Jose, Occidental Mindoro (see Table 2) were included to ensure that supply-side information reflected actual production practices. Employees of LBP and OMECO were also chosen because they were easily accessible and familiar with local food products, providing practical insights into consumer preferences and demand. The survey was administered using a mixed-mode approach. Both printed and online questionnaires were distributed based on respondents' availability and convenience. Online forms were sent via Facebook Messenger, while printed copies were delivered in person. This method enabled broader participation in rural farming communities and institutional workplaces. Data gathering was conducted over a period of ten days, from September 8 to September 17, 2025. This timeline ensured that both supply-side and demand-side respondents were reached within a consistent period. The questionnaire gathered numerical data on mango harvest volumes, selling practices, preferred snacks, purchasing behavior, and willingness to patronize dried mango products. It was reviewed by academic mentors and revised based on their feedback to ensure clarity, relevance, and alignment with the study's objectives.

## **3. Market Study**

### *3.1 Market Description*

San Jose, Occidental Mindoro, is the province's main commercial and agricultural center, making it a strong market for local food products. With more than 150,000 residents across 39 barangays, it is a key hub for trade, transportation, and shopping (Philippine Statistics Authority [PSA], 2023). Its coastal location and good road connections make it a good starting point for distributing agricultural goods in the region and beyond. San Jose has a large, active consumer base, resulting in strong demand for convenient, affordable food options. Busy places like public markets, transport terminals, schools, and government offices support many sari-sari stores, school canteens, and roadside vendors. These primarily serve students, employees, and commuters seeking quick, low-cost snacks. One important location is the OMECO Multi-Purpose Cooperative (OEMCO) Canteen, which serves professionals and staff from nearby institutions, including the Philippine National Bank (PNB), LBP, and the Municipal Hall. This study identifies OEMCO canteen customers as the primary target market because they are a consistent group with regular purchasing habits and a clear interest in convenient, healthier snacks during work hours. The canteen's steady operations and central location also make it a good place to first introduce and test the dried Indian mango product before selling it more widely. In addition to physical stores, San Jose's growing use of digital platforms creates new ways to sell products. Many people use mobile phones and join platforms like Facebook Marketplace and local e-commerce groups, making it easier and cheaper to sell online across barangays (Statista, 2025). By combining in-person sales with online outreach, dried Indian mangoes can be offered as a familiar yet modern product that caters to changing consumer tastes. In summary, San Jose is a suitable location to launch a dried Indian mango business. Its rich agricultural resources, diverse consumer base, and easily accessible sales channels, such as the OEMCO canteen, make it a promising market for a local product that offers both economic and nutritional benefits.

### 3.2 Supply Analysis

A comprehensive supply analysis is essential in determining the feasibility of producing dried Indian mango in San Jose, Occidental Mindoro. This involves examining not only the availability of raw materials but also the broader dynamics of production and demand. As noted by Rose (2018), supply analysis is based on the analysis of supply and demand. Additionally, factors such as production expenses, raw material costs, and workers' compensation must all be included in supply analysis (Srinivasan et al., 2018). To understand local supply, five Indian mango farmers from the barangays of Camburay, Central, San Isidro, and Mapaya in San Jose, Occidental Mindoro, were surveyed. They shared information about their harvest sizes, pricing, and customer connections. These insights help demonstrate the potential for sourcing mangoes for the business and assess whether local farmers are prepared to support dried mango production.

**Table 1**  
*Indian Mango Harvests per Season by Selected Farmers in San Jose*

Farmer Code	Location	Harvest per Season (sacks)
F1	Camburay	20-30
F2	Central	11-20
F3	San Isidro	11-20
F4	San Isidro	1-5
F5	Mapaya	6-10

Table 1 shows the seasonal harvest volumes of Indian mangoes from farmers in San Jose. Camburay records the highest yields at 20–30 sacks per season, while San Isidro and Mapaya report smaller harvests ranging from 1 to 20 sacks. These differences reflect varying farm capacities, suggesting that while some growers can provide larger supplies, others contribute modest amounts. Overall, the figures indicate that local sourcing is possible but will require coordination among farmers to maintain a steady supply for dried mango production.

### 3.3 Demand Analysis

Demand analysis helps estimate customer demand, guiding decisions on pricing, production, and market strategy (MBA Skool Team, 2023). Demand is the desire for the product, and it includes both prospective and retrospective studies to accurately forecast the market and understand the product's historical successes and failures (Gano et al., 2019).

**Table 2**  
*Respondents' Interest in Dried Indian Mango with a Twist*

Response Option	Frequency	Percentage
Yes	178	99.00
Maybe	1	1.00
Total	179	100.00

Table 2 shows a strong potential demand for dried Indian mango among OMECO and LBP employees. Almost all respondents (99%) said they would buy the product, and only one was uncertain. No respondents rejected the idea. This high level of interest suggests the product is likely to be well accepted and ready for local commercialization (Jorge et al., 2020).

**Table 3**  
*Frequency and Percentage of Demand per Purchase*

Quantity per purchase	Frequency	Percentage
1 pack	50	27.93
2-3 packs	96	53.63
4-5 packs	25	13.97
More than 5 packs	8	4.47
Total	179	100.00

Table 3 shows the number of dried Indian mango packs employees are willing to buy per purchase. Most respondents (53.63%) prefer 2–3 packs, while 27.93% choose a single pack, and smaller groups purchase 4–5

packs (13.97%) or more than 5 packs (4.47%). This indicates moderate demand, with consumers open to buying multiple packs, supporting production planning and marketing strategies (Alsubhi et al., 2022).

Table 4 shows that 58% of respondents are willing to pay more than ₱40 per pack of dried Indian mango with a twist. This indicates a strong interest in the product, even at a higher price. Some prefer mid-range prices, and a few are willing to pay up to ₱120, suggesting potential for premium options.

**Table 4**  
*Price Range Acceptance Among Respondents*

Price range(PHP)	Frequency	Percentage
Below 20.00	2	1.00
20.00-30.00	22	12.00
31.00-40.00	50	28.00
Above 40.00	103	58.00
Others (110 & 120)	2	1.00
Total	179	100.00

Based on survey results, dried Indian mango holds a 10% share, while chips and other dried fruits dominate with 57%, and other snacks account for 33%. Despite the relatively small share, the 10% allocation for dried Indian mango is a conservative estimate, grounded in earlier findings where 99% of 179 respondents expressed willingness to patronize the product (as shown in Table 5). This careful estimate reflects the researcher's goal of accurately measuring the product's initial market position while also acknowledging strong consumer interest. The 10% share is the target for the product's early launch. It provides an early sign of potential demand and offers a safe yet hopeful outlook for entering the market and future growth. As more people learn about and can buy the product, its market share could grow, especially since it aligns with consumer preferences for healthy, local snacks (Alsubhi et al., 2022).

**Table 5**  
*Frequency and Percentage of Preferred Munchies*

Munchies	Frequencies	Percentage
Chips	46	26.00
Cookies	34	19.00
Candies	6	3.00
Dried Fruits	56	31.00
Nuts	37	21.00
Total	179	100.00

Table 5 shows the types of munchies preferred by the respondents. Local small businesses offer these products. Preferences are influenced by utility maximization, price sensitivity, and psychological triggers (Dillon, 2025). On the other hand, recent research has shown that product availability, quality, and price are among the main reasons for customer preferences, with accessibility playing a significant role in shaping demand (Melović et al., 2020).

### 3.4 Demand and Supply Analysis

Markets work through the interaction of supply and demand, which affect product availability, pricing, and business sustainability. Demand is the amount of a product that consumers are willing and able to purchase at various price levels. At the same time, supply reflects the quantity producers are willing to offer based on costs, competition, and available resources. Ichwandiani and Hasanah (2025) highlight that both consumer behavior and production challenges shape market access and pricing in Philippine agriculture. This study found strong consumer interest in dried Indian mango with a twist. In a survey, 99.44% of 179 respondents said they would buy the product, and 53.63% said they would buy 2 to 3 packs each time, indicating steady, repeat demand. This aligns with national trends, as more people in the Philippines choose fruit-based snacks for health and convenience. Processed fruit products are particularly popular among urban consumers seeking healthier options (Balita, 2025).

The five-year population growth projection for San Jose, Occidental Mindoro, based on a 1.41 percent annual growth rate, indicates a steadily expanding consumer base for dried Indian mango from 2026 to 2030. With 99

percent of survey respondents expressing willingness to purchase the product, the study conservatively assumes a 10 percent market share, resulting in an estimated demand of 150,026 units in 2026 and rising to 158,667 units by 2030. This projection reflects both the popularity of dried mangoes and other snack products among Filipinos, as observed during retail visits, and the strong acceptance shown in the survey. However, supply projections reveal a consistent gap between demand and production capacity, with annual shortages ranging from 55,009 to 58,178 units, equivalent to 58 percent unsatisfied demand. These findings highlight both the significant market potential for dried Indian mango and the need to expand production capacity to meet consumer demand and reduce unmet market opportunities (Sulistiyawati et al., 2020).

**Table 6**  
*Five-Year Projected Population, Market Share, Demand, and Supply of Dried Indian*

Year	Projected Population	Willingness to purchase	Projected Market Share (10%)	Projected Supply	Demand and Supply Gap Annually	Unsatisfied Demand
2026	166,696	99%	150,026	95,017	55,009	58%
2027	169,046	99%	152,141	96,356	55,785	58%
2028	171,429	99%	154,286	97,715	56,571	58%
2029	173,846	99%	156,461	99,092	57,369	58%
2030	176,297	99%	158,667	100,489	58,178	58%

### 3.5 Marketing Strategies

The strategies below use the marketing mix to support this proposal.

*Product.* The enterprise will produce high-quality dried Indian mango, highlighting its firmer texture and tangy-sweet flavor compared to the Carabao variety. Flavored variants such as sweet chili and honey glaze will cater to evolving consumer preferences. Products will be preservative-free, packaged in eco-friendly resealable bags, and offered in snack-size and bulk packs.

*Price.* Pricing is set to balance affordability and profitability, starting at ₱35.00 per 50g pack in 2026 and gradually increasing to ₱42.35 by 2030 to account for inflation. Discounts for bulk purchases and loyal customers will encourage repeat buying and expand market reach.

*Distribution Channel.* Products will be sold through direct and retail channels, including a store near government offices, sari-sari stores, school canteens, transport terminals, and stalls in public and night markets. Online platforms such as Facebook Marketplace and Instagram will support digital sales, with options for pick-up, delivery, and wholesale arrangements.

*Promotion.* Traditional and digital strategies will highlight the unique qualities of the Indian mango. Eye-catching content will be shared on Facebook, Instagram, TikTok, and Messenger, while tarpaulins in high-traffic areas and free tasting sessions at community events will increase visibility. Collaborations with local stores and school canteens will further expand accessibility.

### 3.6 Product Description

The dried Indian mango snack offers a nutritious, convenient option rich in vitamins A and C. Flavors such as sweet chili and honey glaze provide variety and modern appeal, helping the product stand out in local markets and gift packs. Lightweight and ready to eat, the mangoes are shelf-stable for six months at room temperature or up to one year when refrigerated. Packaged in eco-friendly pouches, they are suitable for retail, gifting, and online sales, making them a practical and distinctive product from Mindoro.

### 3.7 Production Process

The production of dried Indian mangoes involves several careful steps designed to ensure that each snack is

safe, high-quality, and consistent. Fresh Indian mangoes are transformed into a healthy, flavorful, shelf-stable product through clean processing methods and minimal additives. Fresh Indian mangoes are procured directly from farmers in San Jose, Occidental Mindoro, and preserved through freezing to ensure year-round availability. Fruits are sorted, washed, sanitized, peeled, and sliced into uniform ¼ -inch pieces, yielding about 70% usable portions. Slices are pre-frozen at -18°C to prevent clumping and stored until needed. For flavored variants, slices are marinated in honey or sweet-chili mixtures before drying. Dehydration is performed at 55–60°C for 8 hours using food-grade equipment, producing consistent, hygienic results. Finished slices are cooled, inspected, packed into 50g eco-friendly pouches, and labeled with product details. Products are stored in a cool, dry place and distributed through local stores, canteens, and online platforms. This process ensures quality, flexibility, and a steady supply throughout the year (Dry Storage, 2025).

### 3.8 Selling Process

The selling process will involve distributing dried Indian mango to various retail outlets, including public markets, school and office canteens, transport terminals, pasalubong centers, and other stores. These locations will serve as key access points for both local consumers and travelers. To increase convenience, delivery services will be offered for bulk and individual orders. Customers can also place orders online via social media and e-commerce sites, making it easy to shop from home or while traveling.

**Table 7**  
*Production Equipment, Tools, Materials, Supplies, Service Vehicle, and Furniture & Fixtures in Producing Dried Indian Mango with a Twist*

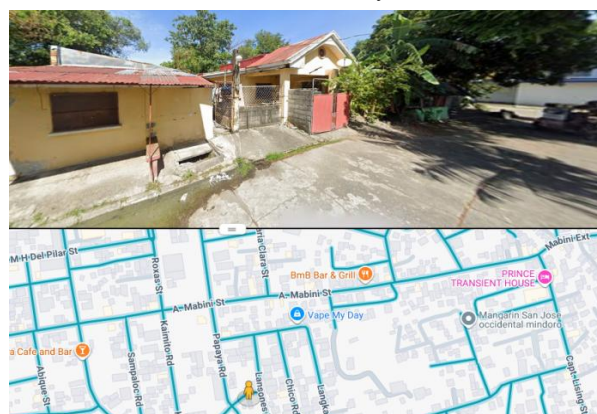
Equipment & Tools	Usage	Estimated Life Span	Quantity	Unit Cost (PHP)	Total (PHP)	
Stainless Steel Knives	Peeling and slicing	2.5 years	5 pcs	600.00	3,000.00	
Cutting boards	Slicing surface for hygiene	2.5 years	3 pcs	1,000.00	3,000.00	
Mixing bowls	Preparing flavor infusions	2.5 years	3 pcs	350.00	1,050.00	
Dehydrator (with trays)	Drying mango slices efficiently	5 years	3 units	10,000.00	30,000.00	
Weighing scale (digital)	Accurate portioning for packaging	5 years	1 unit	1,500.00	3,000.00	
Heat sealer	Sealing packaging pouches	5 years	1 unit	400.00	400.00	
Vacuum Sealer	Removing air before freezing peeled Mango slices	5 years	2 unit	5,000.00	10,000.00	
Chest Freezer	Storing pre-frozen mango slices for year-round processing	5 years	3 units	20,000.00	60,000.00	
Refrigerator	Thawing of frozen mango slices	5 years	1 unit	17,000.00	17,000.00	
<b>Total</b>					<b>127,450.00</b>	
Office Equipment	Usage	Estimated Life Span	Quantity	Unit Cost (PHP)	Total (PHP)	
Cellphone	Mobile Communication with clients/suppliers	5 years	1 unit	3,189.00	3,189.00	
Electric Fan	For ventilation	5 years	1 unit	1,500.00	1,500.00	
<b>Total</b>					<b>4,689.00</b>	
Packaging materials	Usage	Estimated Life Span	Quantity	Unit Cost (PHP)	Daily Cost (PHP)	Total (PHP)
Packaging	Resealable pouches for the final product	One-time	200 pcs	2.50	500.00	10,500.00
<b>Total</b>					<b>10,500.00</b>	
Production Supplies	Usage	Estimated Life Span	Quantity	Unit Cost (PHP)	Daily Cost (PHP)	Total (PHP)
Freezer-Grade Laminated food pouch	Bulk freezing of peeled mango slices	One-time	35 pcs	4.00	140.00	2,940.00
<b>Total</b>					<b>2,940.00</b>	
Office Supplies & Materials	Usage	Quantity	Unit Cost (PHP)	Total (PHP)		
Ballpen	Writing and note-taking	1 box	160.00	160.00		
Calculator	Quick computations for records & sales	1 unit	650.00	650.00		
Record book	Logging transactions and inventory	1 pc	135.00	135.00		
Whiteboard, wallmount 2'x4'	Displaying notes, schedules, and reminders	1 unit	650.00	650.00		
Whiteboard marker	Writing on a whiteboard	1 pc	49.00	49.00		
Marker refill	Extending the use of whiteboard markers	1 pc	105.00	105.00		

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Fire Extinguisher	For emergency fire	1 unit	1,000.00	1,000.00	
Total				2,749.00	
Janitorial Supplies	Usage	Quantity	Unit Cost (PHP)	Total (PHP)	
Broom and dustpan	Sweeping and collecting dirt	1 set	300.00	300.00	
Mop and bucket	Cleaning and sanitizing floors	1 set	250.00	250.00	
Cleaning rags	Wiping surfaces and equipment	20 pc	8.00	160.00	
Disinfectant	Sanitizing work and common areas	5 liters	350.00	1,750.00	
Trash bins and disposal	Waste collection	2 units	100.00	200.00	
Trash bags	Lining bins for easy waste removal	30 packs	39.00	1,170.00	
Hand soap	Hand hygiene	5 bottles	75.00	375.00	
Total				4,205.00	
Service Vehicle	Usage	Estimated Life Span	Quantity	Unit Cost (PHP)	Total (PHP)
Delivery Vehicle	For product delivery	5 years	1 unit	45,000.00	45,000.00
Total					45,000.00
Furniture & Fixtures	Usage	Estimated	Quantity		Total Cost
Table and chair	Work space for staffs	5 years	1 set	1,999.00	1,999.00
Storage Cabinet	For storing products, supplies, or tools	5 years	1 unit	1,500.00	1,500.00
Total					3,499.00

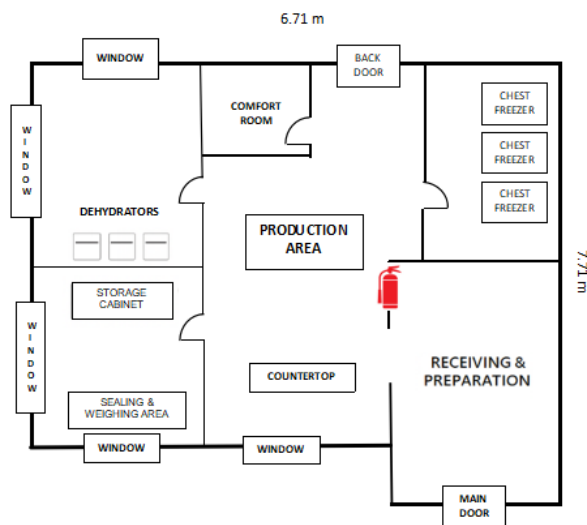
Table 7 presents the essential resources and materials required for the dried Indian mango processing enterprise, encompassing production equipment, office tools, packaging materials, storage pouches, supplies, delivery vehicles, and furniture and fixtures. Core processing equipment supports each stage of the workflow, from peeling and slicing to flavor infusion, dehydration, weighing, sealing, freezing, and thawing. In contrast, office equipment, such as a cellphone and an electric fan, ensures communication and workplace comfort. Packaging needs are addressed through resealable consumer pouches for 50-gram servings and freezer-grade laminated pouches for bulk storage, both designed to maintain product quality and convenience. Daily operations are supported by office supplies for record-keeping and safety, as well as janitorial materials to uphold hygiene standards. A cargo e-bike provides efficient delivery to local outlets, and furniture and fixtures help organize supplies and create a functional workspace. Together, these resources form the foundation for sustainable operations, balancing efficiency, product integrity, and workplace safety (Birt, 2025).

*Project Location.* The enterprise will initially operate from a rented house along Lanzones Road, Barangay Pag-asa, San Jose, Occidental Mindoro. The site provides adequate space for small-scale production and allows a cost-efficient setup while remaining close to mango-producing barangays. Formal approval from the Barangay Council and concerned authorities will be secured, with plans to relocate to a dedicated facility once the business expands. Distribution will focus on the OEMCO canteen at the OMECO Main Office, a strategic site with steady customer traffic from employees, walk-in clients, and nearby institutions. Additional outlets include school canteens, transport terminals, the public market, and the night market, which collectively reach students, commuters, residents, and tourists. By combining production at a practical rental site with high-traffic distribution points, the project aims to maximize reach, maintain efficiency, and establish a strong local presence (One link, 2026).



**Exhibit 1.** Vicinity Map of the Production Area for the Proposed Business

Exhibit 1 presents the vicinity map of the proposed business production site, located along Lanzones Road, in front of PH2 San Jose Water District, near Doña Consuelo Subdivision Plaza, Brgy. Pag-asa, San Jose, Occidental Mindoro.



**Exhibit 2.** Lay out the Production Area of the Proposed Business

Exhibit 2 shows the layout of the production area. The facility is organized into functional zones that support hygienic handling, efficient workflow, and safe processing from raw mango intake to final packaging.

#### 4. Organization and Financial Study

##### 4.1 Source of Financing

The proposed business will hire personnel: one assistant cook and one deliveryman/helper. Since this is a sole proprietorship, the owner will use her personal savings to cover all business expenses and capital needs. The total project cost is estimated at ₱312,711.38. Below is the estimated project cost.

**Table 8**  
*Total Project Cost*

Property, Plant and Equipment	Items	Description
Production Equipment	127,450.00	180,638.00
Service Vehicle	45,000.00	
Office Equipment	4,689.00	
Furniture and Fixtures	3,499.00	
Total Property, Plant and Equipment		
Pre-Operating Expenses		132,073.38
Raw Materials	57,403.50	
Packaging Costs	10,500.00	
Production Supplies	2,940.00	
Office Supplies and Materials Expense	2,749.00	
Janitorial Supplies	4,205.00	
Rent Expense	6,000.00	
Utilities Expense	6,800.00	
Personal Protective Supplies Expense	550	
Permits and Licenses	5,000.00	
Promotional Expenses	1,990.00	
Employee Salary	30,035.00	
Government Mandatory Contributions	3,900.88	
Total Property, Plant and Equipment		
Total Project Cost		

The project costs include the fixed assets, or property, plant, and equipment (PPE), of the proposed business, which are essential at the start of operations. Project costs also include pre-operating expenses like one month's worth of ingredients for dried Indian mangoes, packaging, rent, utilities, protective supplies, employee salaries, and required government contributions. They also cover initial costs for office and janitorial supplies, business permits and licenses, and promotional materials needed to start the business. Production will begin in the 10th week after all pre-operational activities are finished. Moreover, the proposed business will be registered as a sole proprietorship. The initial capital outlay required to start operations is ₱328,285.00, which includes fixed assets totaling ₱128,200.00 and pre-operating expenses of ₱200,085.00. This capital will be sourced from the proponent's personal savings.

#### 4.2 Financial Assumptions

(1) The proposed daily production is 200 pouches, with output expected to grow by 10% annually. (2) The selling price will start at ₱35 per pack, increasing by 10% every two years beginning in the second year (₱38.50 in years two and three, and ₱42.35 in years four and five). (3) Production will operate 21 days each month, totaling 252 days per year. (4) Ingredient and packaging costs are projected to rise by 5% annually. (5) Assets will be depreciated using the straight-line method. (6) Operating expenses—including office supplies, production materials, janitorial needs, rent, utilities, protective equipment, permits, licenses, and promotions—will also increase by 5% per year. (7) Salaries, 13th-month pay, and government contributions are expected to grow by 2% annually. (8) An allowance for spoilage is set at 3% of production. (9) Based on projected sales, the business will remain under the ₱3 million threshold for NON-VAT registration (subject to 3% percentage tax) during the first four years. However, it will exceed this threshold in the fifth year, requiring VAT registration.

### 5. Financial Projections

#### *Financial Ratios and Analyses*

*Gross Profit Ratio.* Manglik (2016) explains that the Gross Profit Ratio (GPR) indicates the amount of profit a business generates from selling products or services before deducting administrative costs. This ratio helps measure how efficiently a business produces goods and services. To find the GPR, subtract the cost of direct materials, labor, and overhead from total sales, then divide that number by total sales. Over the course of five years, the business would have achieved a GPR of 54% in its first year. This means that for every peso earned, ₱0.54 would be the gross profit. In the next four years, the GPR would be 56%, 54%, 56%, and 54%, showing steady profitability during the projection period.

*Net Profit Ratio.* According to Indrati and Putri (2021), the Net Profit Margin (NPM) measures the proportion of net income relative to total sales after accounting for all business expenses. This ratio indicates the percentage of profit earned per peso of revenue, after accounting for all costs and expenses. A higher NPM signifies a more profitable business. For the proposed business, the net profit margin in the first year is 11%, indicating that for every peso of sales, the business earns ₱0.11 in net profit. The projected NPMs for the second to fifth years are 19%, 18%, 25%, and 22%, respectively.

*Return on Investment.* According to Fernando (2025), Return on Investment (ROI) is a financial metric that measures the profit generated by an investment relative to its costs. Important factors that affect ROI include the initial capital, ongoing maintenance costs, and the cash generated by the investment. ROI is calculated by dividing the return from an investment by the total expenditure incurred. The business is expected to recover its initial investment by the second year of operation. By that time, cumulative profits are projected to exceed twice the original capital. This indicates strong financial performance and high profitability (Alshehadeh et al., 2024). The upward trend in ROI, from 60% in the first year to over 220% by the fifth year, demonstrates the viability and growth potential of the dried Indian mango enterprise.

*Socio-Economic Aspects* - This dried Indian mango snack business is not just about making a profit. It is

about building something meaningful for the community. By working closely with local farmers, hiring local workers, and offering a product that reflects the region's agricultural strengths, the business becomes part of a bigger story. It supports livelihoods, encourages entrepreneurship, and celebrates local identity (Paula et al., 2021). As the person behind the business, the owner benefits not only financially but also professionally. Running the operation allows her to apply her skills in planning, documentation, and production management. It also helps her grow her network and reputation. Over time, this venture can become a model for others who want to start their own small-scale food businesses. Even with a small team, the business creates real opportunities for local workers. From preparing mangoes to packaging and delivery, each role offers fair pay and hands-on experience. These jobs help families earn a steady income and give workers a chance to learn new skills they can use in future ventures or employment. The business relies on fresh Indian mangoes sourced directly from nearby farms. This steady demand gives farmers a reliable market for their harvests and encourages them to keep improving their practices. It is a win for both sides.

The business gets quality fruit, and farmers get consistent income and recognition for their work. By operating legally and responsibly, the business contributes to local government revenue through taxes, permits, and fees. It also supports broader goals like reducing unemployment and promoting agri-based industries. As the product gains attention, it may even help boost tourism and local pride in San Jose's homegrown products. The final product is a healthy, locally made snack that offers something different from mass-produced options. It is free from artificial preservatives and made with care. This makes it a great choice for people who want to eat better and support local businesses. It also helps reconnect consumers with the value of Filipino-grown produce.

## **6. SWOT and Potential Problem Analysis**

### *6.1 Strengths and Weaknesses of the Dried Indian Mango Snack Business*

On the positive side, the product uses fresh mangoes from nearby farms, ensuring high quality while also supporting local growers. Because the fruits are sourced directly, the snack remains affordable without losing its natural taste and freshness. The business location is another advantage, as it is close to schools, homes, and commercial areas, making it easy for customers to access the product. Social media also plays a big role, helping the business reach more people, offer free delivery, and build trust through real customer feedback. The product itself is simple, clean, and preservative-free, which fits well with the growing preference for healthier, locally made snacks (Dwivedi et al., 2021). On the other hand, some challenges need attention. The short shelf life of dried mango slices can lead to spoilage if not stored properly, resulting in waste or buyer dissatisfaction. The business also relies heavily on manual labor for slicing, drying, and packing, which can slow down production and sometimes affect consistency. Finally, as a new brand, it still has limited recognition and trust in the market, meaning it will take time and effort to establish a solid reputation.

### *6.2 Opportunities*

There are many chances to grow. The business can work with local agencies such as the Department of Science and Technology – Provincial Science and Technology Office (DOST PSTO) and the Municipal Agriculture Office (MAO) of San Jose to improve production and receive support. These partnerships can help with training, technology, and a steady supply of mangoes. The product can also be improved by offering new flavors, dips, or special packaging for events. These ideas can attract more customers and increase sales. With more people seeking clean, local food, the business has a good chance of expanding into school canteens, weekend markets, and even tourist spots. The growing population of tricycle and motorcycle drivers in San Jose presents a significant opportunity for long-term sustainability. As transportation demand increases, more individuals will apply for new licenses or renew their licenses, creating consistent demand for review services. There is also an opportunity to expand services in the future. The center may offer refresher courses for license renewals, special review sessions for professional driver applicants, or seminars on traffic law updates and responsible driving practices. This

diversification can broaden revenue sources and strengthen market position. Technological advancement presents another opportunity. The integration of computer-based mock examinations and digital learning materials can enhance service quality and attract younger applicants who are more comfortable with digital platforms. Moreover, increasing public awareness of road safety and compliance with traffic regulations creates a favorable environment for educational services focused on driver competency. As enforcement becomes stricter and examinations remain competency-based, applicants may recognize the importance of structured preparation. While for threats, other snack makers and native delicacy sellers may compete, especially those with loyal customers and lower prices. If the business does not continue to improve or remain consistent, it might lose its edge. External problems like bad weather, power outages, or rising mango prices can also affect production. These risks need to be managed carefully (Thomas & Helgeso, J., 2021).

## 7. Conclusions

The study confirmed the financial viability, feasibility, and market potential of the dried Indian mango snack business in San Jose, Occidental Mindoro. Based on the findings, several conclusions were drawn: (1) there is clear demand for dried Indian mango snacks, supported by consumer interest and willingness to purchase the product; (2) the enterprise can provide a steady supply of affordable yet high quality mango snacks, making it competitive in the local market; (3) the chosen location is strategic, being close to residential areas, schools, and commercial centers, which allows easy access and distribution; (4) as a small scale enterprise, sole proprietorship is the most practical management structure, giving the owner direct control over operations; (5) the project requires a manageable investment, making it accessible for startup while still offering strong profitability; and (6) the business contributes to socio economic development by creating jobs, generating government revenue, supporting local farmers, and offering consumers healthier food options rooted in local identity.

**Recommendations** - Based on the findings, several measures are suggested to strengthen the dried Indian mango business. The owner should build strong partnerships with local farmers to secure a consistent supply of high-quality fruit and reduce the risk of shortages. Preservation methods such as vacuum sealing or controlled dehydration may be adopted to extend shelf life. Gradual investment in semi-automated equipment is recommended to improve efficiency and product consistency. Marketing should highlight local origin, health benefits, and cultural value through social media, trade fairs, and free sampling in schools and communities. To address external risks, the owner should invest in a generator set, monitor power schedules, and maintain frozen stock during peak harvests. Worker training on food safety, hygiene, and packaging, supported by agencies such as DOLE, DTI, and DA, will enhance product quality. Financing options such as microloans or community-based crowdfunding can support equipment upgrades and expansion. Product innovation, such as blending dried mango with tamarind for new flavor profiles, may attract diverse markets. Finally, collaboration with academic institutions and researchers is encouraged to explore consumer preferences and expand distribution into tourism and regional trade fairs.

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