



# WHY MANGO?

- Mango is the third most important fruit crop in the Philippines. Based on their usage, mango varieties can be classified as green, mature, ripe or for processing. It is eaten as dessert (ripe) or relish (immature) depending on fruit maturity.
- Perishable fresh mangoes including rejects (deformed, cracked and mechanically damaged fruits) can be converted into forms that can be consumed for a longer time or transported to nearby markets, all-year round.
- There is a wide variety of products to choose from such as mango puree, dried mangoes, candy, jam, wine, essence, canned (either pulped or sliced), juice, nectar, chutney, pickled, roll powder, halves or scoops in light syrup and used as flavoring for ice cream, bakery products and confectioneries.
- Philippines is blessed to have lands and climate that favor the cultivation of one of the best mango variety in the world which is the "Philippine Carabao Mango" and other indigenous and introduced varieties, strains and selections.

# TOP 5 MAJOR MANGO PRODUCING REGIONS IN 2019

Based on the Philippine Statistics Authority's (PSA) data, the total production of mango in 2019 is 737.92 MT. Ilocos Region recorded the highest share of 178.54 MT or approximately 24% share to the total production, followed by Region VII with 80.15 MT, Region IX with 77.01 MT, Region XII with 59.99 MT and Region VI with 54.01 MT.





# **MARKET POTENTIAL**

- The importance of mango does not only come from the export side. Mango is the Philippine national fruit, loved by the Filipino people, eaten as fresh or processed.
- The three well known variety of mango in the Philippines are Carabao mango, Pico and Katchamita (also known as Indian Mango). Carabao is the dominant variety that is widely grown throughout the country and is the sole exported variety.
- The nutritional characteristics of the mango contribute to its growing demand. Particularly, there is an elevated demand for "ready-to-eat" mangoes and processed products such as dried or pureed mango (DTI, 2018).
- The leading export destination of Philippine fresh and processed mangoes are China, United States, Korea and Japan.
- There is an increasing demand of processed fruits, including dried mango, puree, canned and frozen mangoes, by the European market. European countries do not have suitable agro-climatic conditions to cultivate tropical fruit and vegetables, so they depend heavily on imports from tropical and semi-tropical countries.

#### SUMMARY OF 15-YEAR AVERAGE COST AND RETURNS OF A 1-HECTARE MANGO FARM

Particulars	
Gross Returns (PhP/ha)	160,666.67
Total Costs (PhP/ha)	75,280.24
Net Returns (PhP/ha)	85,386.42
Net Profit-Cost Ratio	1.05
Cost per Kilogram (PhP)	38.73
Yield per Hectare (kg/ha)	3,516.67
Farmgate Price (PhP/kg)	54.17
Return on Investments (ROI, %)	104.86

Based on the Estimated Cost and Returns of Establishing a 1 Hectare Mango Farm provided by the Bureau of Plant Industry-Guimaras National Crop Research, Development and Production Support Center (BPI-GNCRDPSC)







# **BUYERS/PROCESSORS IN THE PHILIPPINES**

BUYER	ADDRESS
Kian Sun International, Corporation	Block 10 Lot 6, Muralla Industrial Park Libtong, Meycauayan, Bulacan
Agrinurture Inc. (Formerly Mabuhay 2000 Enterprises, Inc.)	Unit 111 Cedar Mansion, Escriva Drive, Ortigas Centre, Pasig City
Cebu Legacy Marketing Corporation	Bo. Pilit, Cabancalan, Mandaue City, Cebu
Hi-Las Marketing Corp	Avocado Road, Special Economic Zone, FTI, Taguig City, Metro Manila
KLT Fruits Inc. Mango Puree	Unit 610 Globe Telecom Plaza, Pioneer corner Madison Streets, Mandaluyong City
Don Roberto's Winery Corporation	Ground Floor, Doña Enriqueta Bldg., 100 Gen. Topacio St., Imus, Cavite
Destileria Limtuaco & Co. Incorporated	1830 EDSA, Quezon City
Guimaras Fruits Processing Plant (GFPP)	Jordan, St. Teresa, 5045, Guimaras, Jordan, Guimaras
Mc Nester Food Products	San Isidro, Buenavista, Guimaras
Jojo's Food Products	Hernan Cortes Street, Banilad (PO Box 33), Mandaue City 6014 Cebu
Profoods International Corporation	No. 12 Pres. Roxas St., Mabolo, Cebu City
7d Food International, Inc.	(Cebu Sacres Subdivision, A.S. Fortuna St., Mandaue City
Cebu Legacy Marketing Corp. (Cebu)	Bo. Pilit, Cabancalan, Mandaue City, Cebu
Polyfruits, Inc.	Sinanga, Polanco, Zamboanga Del Norte

# **GOVERNMENT SUPPORT/SERVICES:**

## Financial Support

- The Department of Agriculture (DA) through the Agricultural Competitiveness Enhancement Fund (ACEF) makes available loans with 2% interest per annum. The loan program is being administered by the Land Bank of the Philippines (LBP).
- The Agricultural Credit Policy Council (ACPC) offers loan programs namely Expanded Sure Aid and Recovery Project (SURE COVID-19), Kapital Access for Young Agripreneurs (KAYA), and the Agri-Negosyo (ANYO) Loan Program. The said loan programs target farmers and fisherfolks, the youth, Overseas Filipino Workers (OFWs), and Micro, Small and Medium Enterprises as beneficiaries.
- Land Bank of the Philippines (LBP) offers loans for agricultural production and processing under its usual credit programs for small farmers.
- The Department of Trade and Industry (DTI) through the SB Corporation offers varied loan packages for MSMEs under the Pondo sa Pagbabago at Pag-asenso (P3) Program.

## **Technical/Non-Financial Support**

Technical assistance through the different agencies under the Department of Agriculture:

- High Value Crops Development Program (HVCDP) provides technical support services in areas covering production, market development, extension support, education and training, and research and development. HVCDP also provides irrigation network services, as well as agricultural and fishery machinery, equipment and facilities support.
- Bureau of Plant Industry (BPI) distributes/ sells quality planting materials, provides technical assistance such as propagation, production and postharvest handling and facilitates the issuance of appropriate certifications, permits and licenses.



# **INVESTMENT GUIDE FOR MANGO**

- Agribusiness and Marketing Assistance Service and its regional counterparts Agribusiness and Marketing Assistance Division (AMAS/AMADs) provide webinars on agribusiness investment opportunities and market linking activities.
- Agricultural Training Institute (ATI) makes available technical trainings and seminars.

#### Assistance from other agencies:

- The Department of Science and Technology (DOST) provides loans in the form of facilities and equipment through its Small Enterprise Technology Upgrading (SET-UP) Program.
- DOST provides Packaging and Labeling Services to SMEs for the development of package design, technical consultancy for the improvement of packaging system thru proper labeling and packaging, nutrition facts analysis, Shelf life testing and training.
- DTI provides business and technical assistance on product development, productivity enhancement, domestic and international marketing assistance, as well as Shared Service Facilities (SSF) to qualified associations.

#### REFERENCES

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- 7. Department of Trade and Industry-Export Management Bureau Tradeline Philippines accessed from http://www.tradeline.dti.gov.ph/
- 8. Center for the Promotion of Imports (CBI), Ministry of Foreign Affairs, The European Market Potential for Mango Puree accessed from https://www.cbi.eu/market-information/processed-fruit-vegetables-ediblenuts/mango-puree/market-potential
- 9. Bureau of Plant Industry-Guimaras National Crop Research, Development, and Production Support Center (GNCRDPSC). Mango Production Guide. 2019

# **INVESTMENT GUIDE FOR MANGO**

# **SUMMARY OF 15-YEAR COST AND RETURNS OF A 1-HECTARE MANGO FARM**

3dv III JEDVA							a	ESTIMATED AMOUNT	MOUNT						
PARIICULARS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 4   YEAR 5   YEAR 6   YEAR 7	YEAR 6		YEAR 8	YEAR 9	YEAR 9 YEAR 10 YEAR 11	YEAR 11	YEAR 12	YEAR 12 YEAR 13 YEAR 14 YEAR 15	YEAR 14	YEAR 15
A. Farm Establishment															
Planting Materials (110 pcs of grafted carabo mango)	3,300.00														
Fertilizer and Fungicides	2,344.50														
Labor Cost	33,560.00														
Tools and Equipment	10,110.00														
Other supplies and materials	1,430.00														
B. Farm Maintenance															
Pruning		1,265.00			2,810.00			2,800.00		4,125.00			4,260.00		5,865.00
Weeding and Cultivation /Underbrushing		3,195.00	4,595.00	3,195.00		4,960.00 3,560.00	4,960.00	3,925.00	5,325.00	3,925.00	4,290.00	3,590.00	4,290.00	3,955.00	4,655.00
Fertilization	350.00	00'209	849.00	1,441.00		1,610.00	1,368.00 1,610.00 3,170.00	4,080.00	5,290.00	8,350.00	7,710.00	8,950.00	10,510.00	11,390.00	12,600.00
Irrigation	5,200.00	5,200.00	5,200.00		7,100.00 6,500.00 6,500.00 8,650.00	6,500.00	8,650.00	7,800.00	7,800.00	9,250.00	8,400.00	8,400.00	00'006'6	8,800.00	8,800.00
Flower Induction				37,740.00	37,740.00 2,280.00 2,780.00 9,580.00 3,490.00	2,780.00	9,580.00	3,490.00	3,280.00	36,210.00	12,360.00	7,770.00	7,770.00 6,060.00	6,560.00	6,770.00
Fruit Bagging				4,458.00		3,136.00 5,208.00 10,280.00	10,280.00	8,636.00	16,216.00	13,680.00	22,276.00	17,180.00	24,988.00	21,816.00	26,124.00
Integrated Pest Management (IPM)	1,260.00	1,608.50	2,445.00	8,010.98	9,139.98	10,391.78	14,120.45	20,123.60	20,123.60	25,814.68	25,814.68	31,178.45	31,178.45	38,175.49	38,175.49
Harvesting				11,200.00	11,200.00 5,150.00 11,650.00 2,150.00 24,075.00	11,650.00	2,150.00	24,075.00	4,750.00	36,100.00	7,400.00	44,150.00	44,150.00 10,825.00	51,350.00	11,900.00
Total Cost	57,554.50	57,554.50 11,875.50		73,144.98	35,343.98	41,699.78	52,910.45	74,929.60	62,784.60	137,454.68	13,089.00   73,144.98   35,343.98   41,699.78   52,910.45   74,929.60   62,784.60   137,454.68   88,250.68   121,218.45   102,011.45   142,046.49   114,889.49	121,218.45	102,011.45	142,046.49	114,889.49
Gross Income	0	0	0	30,000 00	30,000.00	40,000.00	. 00 000 09	100,000,001	150,000.00	200,000.00	30,000.00  30,000.00  40,000.00  60,000.00 100,000.00 150,000.00 200,000.00 300,000.00 330,000.00 360,000.00 3	330,000.00	360,000.00	390,000.00	420,000.00
Net Income	57,554.50	11,875.50	13,089.00	-57,554.50   11,875.50   13,089.00   43,144.98   -5,343.98   -1,699.78   7,089.55   25,070.40	- 5,343.98	1,699 78	7,089.55	25,070.40	87,215.40	62,545.32	87,215.40 62,545.32 211,749.32 208,781.55 257,988.55 247,953.51 305,110.51	208,781.55	257,988.55	247,953.51	305,110.51
ROI (%)				- 58 99	- 15.12	4 08	13.40	33.46	138.91	45.50	239.94	172.24	252 90	174.56	265.57
Course, DDI CNICONOS	Joan Joan														

Source: BPI-GNCRDPSC

The estimated costs of supplies, materials, tools and equipment were based on January 2019 prices under Guimaras condition. Cost of land is not included in the computation.

The establishment observed a planting distance of  $10 \times 10$  meters or 100 trees in a hectare,

No pruning activity on the first year and can be done after 1 or 2 years depending on the growth of the trees. Pruning on the above table will be done at Year 2, Year 5, Year 8, Year 10, Year 13 and Year 15

Cultivation of the space in between trees through plowing and harrowing at least once a year and will be done every other year. Under brushing will Ring weeding at a distance of 1 meter from the trunk for 1-5 years old and canopy drip for 6-15 years old trees.

Fertilization requirements for Year 1 are already included in the establishment. At Year 4 and beyond, foliar fertilization for flowering and fruiting be implemented during the period where cultivation is not done.

Harvesting will start at Year 4. A positive net income will be realized at Year 7. trees will be applied.

Farm gate price at Php 50.00/kg (Year 4 to 10) and Php60.00/kg (Year 11-15).

Estimated volume of production- Year 4 (600 kg), Year 5(600 kg); Year 6 (800 kg); Year 7 (1,200 kg); Year 8 (2,000 kg); Year 9 (3,000 kg); Year 10 (4,000 kg); Year 11 (5,000); Year 12 (5,500); Year 13 (6,000); Year 14 (6,500); Year 15 (7,000)