

INVESTMENT GUIDE

FOR SELECTED AGRICULTURAL COMMODITIES IN CALABARZON



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Executive Summary

With increasing demand for agricultural products, agribusiness offers investment opportunities which can drive economic growth, create employment, and contribute to rural development. This investment guide provides an overview of the agricultural sector in CALABARZON region. It aims to serve as a one stop reference for potential investors, entrepreneurs, and farmers in making agribusiness investment decisions. It highlights regional advantages, presents the production costs and return analysis for the selected commodities in the region, provides information on business registration and support services and incentives provided by various government agencies.

CALABARZON offers several unique factors and advantages. It has a favorable climate for different crops and livestock, easy access to a large potential market, and accessible transportation that extends to urban areas, including Metro Manila, facilitating efficient product distribution. These, combined with the region's wide range of telecommunication networks and supportive research institutions, as well as its effective crime rate management, make the region a safe and favorable place for putting up an agribusiness venture.

This guide presents opportunities for three of the major agricultural commodities produced in CALABARZON—lowland vegetables, broiler chicken, and chicken layer eggs. The region ranks 1st in terms of egg production, 3rd for broiler chicken, and for lowland vegetables: 2nd in ampalaya, 3rd in eggplant, 4th in tomato, 7th in sitao, and 8th in okra and squash. By 2045, there is an expected deficit of 87,944.06 MT in the supply of lowland vegetables. Poultry, with its versatility in cooking methods, is also expected to witness growth in terms of per capita consumption (BAI, 2022), indicating substantial market potential for these products.

The analysis of the production costs and returns for the selected agricultural commodities in this guide shows promising investment prospects, taking into consideration the cost structure and gross sales, the net income, and the return on investment for each crop and livestock category. The favorable return on investment, even under less optimal conditions, backs up the region's potential as an attractive destination for agricultural investments.

The Department of Agriculture offers farm inputs, marketing assistance, technical production support and financial support through grant and loans to agri-entrepreneurs. A range of government projects, programs and training/capacity building services are also available to agri-enterprises, to equip them with resources and knowledge that will enhance their skills, productivity, and competitiveness. Moreover, both fiscal and non-fiscal incentives are in place for those who invests in agribusiness in CALABARZON.

Regional Profile

CALABARZON, consisting of Cavite, Laguna, Batangas, Rizal, and Quezon province, offers a favorable environment for agricultural investments. It is located at the southwestern part of Luzon with Central Luzon provinces in the North, Philippine Sea in the East, Bicol Peninsula in the Southeast, Tayabas Bay in the South, Philippine Sea and Metro Manila in the West. In 2022, the region posted an economic growth of 7.8% which was higher than the national average of 7.6% (Cabuenas, 2023), which may indicate more customers for businesses, increased profitability and greater opportunities for further growth and expansion.

Total Land Area	16,228.61 km2 (RDC IV-A, 2023)
Alienable and Disposable Land	1,051,948 hectares (RDC IV-A, 2023)
Agricultural Land Area	860,186.60 hectares (RDC IV-A, 2023)
Potential Irrigable Land	97,710 hectares (NIA IV-A, 2023)
Total Population	16,195,042 (Mapa, 2021)
Number of Municipalities/Cities	122 municipalities, 20 cities
Number of Negosyo Centers	108 (as of 2019)

CALABARZON, consisting of Cavite, Laguna, Batangas, Rizal, and Quezon province, offers a favorable environment for agricultural investments. It is located at the southwestern part of Luzon with Central Luzon provinces in the North, Philippine Sea in the East, Bicol Peninsula in the SoutheaCALABARZON offers several unique factors and advantages that make it an attractive destination for agricultural investments:

Favorable Climate: The region has all the four (4) types of climate, Type I – IV, which allows the cultivation of a variety of crops.

Large Potential Market: The 2020 Census done by the PSA shows that CALABARZON holds 14.84% of the population of the Philippines and is recognized as the most populous region. This ensures a readily available market for agricultural products. In addition, the region has a number of urban centers such as Calamba, Lucena and Antipolo, and is in proximity to Metro Manila, which is one of the three designated metropolitan centers in the Philippines by NEDA, along with Cebu and Davao.

Accessible Transportation: According to the CALABARZON RDP 2023-2028, as of 2022, the region has a total of 2,543.83 kilometers of roads. It also has two major ports namely Batangas and Lucena Ports, which provide vital points for passengers and shipments to nearby regions. Air transport is also made available through the proximity of NAIA, and the presence of the Civil Aviation Authority-Operated Airports and private airstrips in Batangas and Quezon. In addition, the development of Sangley Point International Airport in Cavite is ongoing. These infrastructures make the facilitation of movement of agricultural inputs and produce easy, at the same time; they provide linkages to neighboring regions, increase market accessibility and open future investments in the region.

Reliable Communication: A wide range of telecommunication and network providers are available to stay updated with all recent information regarding weather and ways of enhancing crop quality and production. The government also aims to further enhance telecommunications in the region by modernizing digital infrastructure, which involves revising policies, promoting shared tower facilities, and expanding broadband programs.

Availability of Research and Technological Resources: The region has a number of research institutions that provide further research support, offer a sense of community by creating a platform for knowledge exchange and collaboration, and promote continued learning to investors and agribusinesses.

- a. Research Institutions
 - i. International Rice Research Institute (IRRI), Los Baños, Laguna
 - ii. ASEAN Center for Biodiversity (ACB), Los Baños, Laguna
 - iii.Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), Los Baños, Laguna
- b. Government Agencies
 - i. Department of Agriculture IV-A and its attached agencies
 - ii. Department of Science and Technology (DOST) IV-A
 - iii.Department of Trade and Industry (DTI) IV-A
- c. State Universities and Colleges (SUCs)

SUCs	Campuses that offer Agriculture and Fishery
University of the Philippines	Los Baños, Laguna
Laguna State Polytechnic	Siniloan, Laguna
University	Los Baños, Laguna
Southern Luzon State	Lucban, Quezon
University	Alabat, Quezon
	Catanauan, Quezon
	Infanta, Quezon
	Tagkawayan, Quezon
	Tayabas City, Quezon
	Tiaong, Quezon
Cavite State University	Indang, Cavite
	Naic, Cavite
University of Rizal System	Cardona, Rizal
	Tanay, Rizal
	Rodriguez, Rizal
Polytechnic University	Lopez Quezon
of the Philippines	Mulanay, Quezon

Peace and Order: In the first quarter of 2023, CALABARZON achieved 83.17% crime rate solution efficiency, closely in line with the national average of 87.51%. This shows the region's strong efforts in effectively managing and preventing crime, which consequently contributes to a safer environment for its people (Cayon, 2023).

THE COMMODITIES

A. PRODUCT

- 1. COMMODITY DESCRIPTION
 - a. Lowland Vegetables



a.1. Ampalaya. Grows in any type of soil, but the best type and texture is sandy loam or clay loam with good drainage, high organic matter content and a pH of 6.0-6.7. It can be planted throughout the year, but the best season is from October to February (DA RFO No. 02, 2017). Sta. Rita, Jade Star, Bonito and Galaxy F1 are the varieties being cultivated in the region.



a.2. Eggplant. It is a perennial plant that thrives well in deep, fertile, and well-drained soil with high organic matter content and pH between 5.5 to 6.8. The varieties mostly preferred and adapted in CALABARZON are Dumaguete, Long Purple OP, Morena F1, Casino F1, Gwapito F1 and Sikat F1.



a.3. Okra. Okra is a tall growing, warm season and annual vegetable crop. It can tolerate a wide range of soil types but silty to sandy loam soils that are well-drained and with adequate organic matter may provide better yield.



a.4. Sitao. Pole sitao is an herbaceous annual crop that produces 30-60 cm long pods which hang in pairs with many seeds. In the Philippines, it is the most popularly produced vegetable among legumes because the pods, young shoots and beans are available throughout the year. It is well suited in a warm climate at a temperature range of 20-35°C (BPI, 2013). A friable fertile soil with pH value ranging from 5.5 to 6.8 is preferred to obtain healthy growth and high-quality pods. The most popular varieties cultivated in CALABARZON are Galante, Mariposa, Sandigan, Negros and Green Star (HVCDP, 2022).



a.5. Squash. This is a popular year-round vegetable in the Philippines. It is a viny, creeping, and trailing crop that can grow over four meters long. It is cultivated for its immature fruits, young shoots, flowers, and seeds (Tababa, 2023). It performs best in well-drained, sandy loam and clay loam soils with pH level of 5.5 to 6.5, and the optimum temperature for good crop growth ranges from 18-30°C (DA RFO No. 02, 2017).



a.6. Tomato. It is grown for its edible red berry-type fruit, which contains significant amounts of vitamins A and C, and a variety of health benefits (HVCDP, 2022). The varieties being produced in CALABARZON are Apollo, Maguilas, Diamante Max, Atlas (F1), Atlas (grafted, kamlong), and cherry tomato. It requires a relatively cool and dry climate with an optimum temperature of 21-24°C and grows best in fertile and well-drained soil rich in organic matter, particularly in sandy loam and clay loam soils with a pH of 5.5 to 8.0 (DA RFO No. 2, 2017).

b. Layer (Egg)



Layers are mature female chickens kept for egg production. There are two egg product forms being sold in the market; eggs-in-shell (fresh, chilled, preserved) and egg products (liquid, frozen, and dried). Eggs-in-shell are sold in trays and per piece while egg products are sold to institutional and select retail outlets.

c. Broiler (Meat)



Broiler is any chicken that is bred and raised specifically for meat production. It is the most progressive animal enterprise in the Philippines and it dominates meat consumption since it is generally affordable, low in fat, and faces few religious and cultural restrictions (BAI, 2022). Some of the most common commercial broiler breeds in the country are Arbor Acres Broilers, Hubbard Broilers, Shaver Starbo Broilers, and Cobb Broilers.

2. PRODUCTION SITUATION

Table 1. Area Planted, Production and Yield of the Six Selected Lowland Vegetables, by Province (2022)

	Area Planted (ha)	Production (mt)	Yield (mt/ha)
AMPALAYA			
Cavite	264.00	1,672.17	6.33
Laguna	131.40	842.94	6.42
Batangas	345.40	5,170.05	14.97
Rizal	20.45	104.67	5.12
Quezon	1,525.00	11,311.14	7.42
Total	2,286.25	19,100.97	8.35
EGGPLANT			
Cavite	48.00	147.73	3.08
Laguna	179.22	2,435.64	13.59
Batangas	363.00	2,806.88	7.73
Rizal	75.00	645.16	8.60
Quezon	945.00	20,040.79	21.21
Total	1,610.22	25,076.20	15.57
OKRA			
Cavite	38.50	217.70	5.65
Laguna	64.67	504.49	7.80
Batangas	34.00	421.70	12.40
Rizal	10.70	68.42	6.39
Quezon	37.50	82.26	2.19
Total	185.37	1,294.57	6.98
SITAO			
Cavite	100.00	429.16	4.29
Laguna	129.53	851.59	6.57
Batangas	232.00	1,047.54	4.52
Rizal	91.50	465.11	5.08
Quezon	869.00	2,604.50	3.00
Total	1,422.03	5,397.90	3.80
SQUASH			
Cavite	117.00	1,736.31	14.84
Laguna	223.15	7,209.71	32.31
Batangas	351.42	2,307.52	6.57
Rizal	29.50	252.80	8.57
Quezon	1,180.50	21,00924	17.80
Total	1,901.57	32,515.58	17.10

	Area Planted (ha)	Production (mt)	Yield (mt/ha)
ТОМАТО			
Cavite	40.00	232.39	5.81
Laguna	555.00	5,747.76	10.36
Batangas	122.01	2,341.56	19.19
Rizal	25.00	193.16	7.73
Quezon	444.00	5,841.29	13.16
Total	1,186.01	14,356.16	12.10

Source: Philippine Statistics Authority OpenSTAT

The table shows that the provinces with the largest area planted do not always have the largest yield, which is the ratio of production to the area planted. For example, in the case of ampalaya and sitao, the province with the largest area planted with these two crops is Quezon. However, the province with the highest yield is Batangas. Among the crops, only eggplant produced the highest yield at the province with the largest area planted with it.

While there may be certain challenges causing this inconsistency such as soil quality, water availability, pests, and diseases, farming practices and access to technology and resources, these challenges present opportunities for improvement and growth. With proper interventions and adoption of effective agricultural practices, there is great potential to enhance production in all of the provinces of CALABARZON. This, in turn, can lead to increased profitability for farmers and entrepreneurs involved in the cultivation of these crops.

Table 2. Number of Farms and Volume of Production of Broiler and Layer, per Province

	No. of Farms	Volume of Production
LAYER		
Cavite	4	
Laguna	0	
Batangas	46	224,422.1 metric tons
Rizal	6	
Quezon	0	
Total	56	
BROILER		
Cavite	6	
Laguna	5	
Batangas	21	311,358.6 metric tons
Rizal	3	
Quezon	28	
Total	63	

Source: DA-4A, Regulatory Division (2023) and Philippine Statistics Authority

B. MARKET

1. DEMAND SITUATION/PROJECTION

a. Lowland Vegetables

Based on PSA's population projection, the Philippines' population is expected to rise from 93 million in 2010 to 142 million by 2045, with an average annual growth rate of 1.21%. Based on the projections, CALABARZON will remain the highest populated region, while Metro Manila, the major market for lowland vegetables from CALABARZON, will follow together with Central Luzon, both projected to have 14.51 million people in 2045.

If we consider the growth rates for the population to be the same as the growth rate of utilized per capita, also known as per capita consumption, and using the data acquired from PSA-CountryStat as cited by the Philippine Rural Development Project of DA IV-A in their publication Value Chain Analysis: Lowland Vegetables (2019), the demand and supply for lowland vegetables can be projected as shown in table 3.

Table 3. Projected Demand and Supply Analysis for Lowland Vegetables in the CALABARZON, 2025-2045

Year	Population	UT per capita (kg/year)	Growth Rate % (Medium Assumption)
2025	16,664,400	6.99	1.41
2030	17,760,100	7.07	1.21
2035	18,702,100	7.14	1.02
2040	19,500,000	7.20	0.84
2045	20,114,800	7.25	0.65

Projected Demand (kg)	Projected Supply (kg)	Deficit (kg)
116,484,156	91,286,405.30	25,197,750.70
125,563,907	81,461,456.52	44,102,450.48
133,532,994	72,693,944.69	60,839,049.31
140,400,000	64,870,060.28	75,529,939.72
145,832,300	57,888,242.80	87,944,057.20

Source: DA IVA—PRDP (2019) and PSA

The projections show that in the years ahead, the deficit in supply will persist, which presents a market opportunity for investors and agribusinesses to fill this gap by increasing production. Additionally, addressing supply deficits can also contribute to reducing price fluctuations, creating an environment that supports sustainable business operations.

b. Layer (Egg)

According to PSA's February 2017 Consumption of Selected Agricultural Commodities Report, as cited by Neves (2022), the annual consumption of chicken eggs per person averaged 84 pieces at the national level. In 2020, the Faostat reported per capita consumption at 5.06 kg, which is 2.64% more than in the previous year (HelgiLibrary, 2023). The expected average volume per person in the eggs market is forecasted to be 11.1 kilograms in 2023. The projected volume is expected to reach 1.7 billion kilograms by 2028, with the eggs market anticipated to demonstrate a 6.3% growth in volume by 2024 (Statista, 2023).

Broiler c.

Per capita consumption rose by four percent per year from 11.6 kg in 2009 to 15.6 kg in 2018. Consumption averaged 13.4 kg per person per year over the past decade (BAI, 2022).

For 2025, the demand at 2% growth rate is expected to be at 1,775,890,943.27 kg, at 3% growth rate to be 1,793,301,638.79 kg., and at 6% growth rate to be 1,845,533,725.35 kg. For 2040, figures are at 2,187,616,432.54 kg., 2,274,675,179.39 kg., and 2,551,470,472 kg at 2%,3% and 6% growth rates, respectively. Calculations were based on per capita consumption sourced from statista.com and growth rate from Census of Populations in the Philippines (BAI, 2022).

2. MARKET POTENTIAL

Lowland Vegetables

Lowland vegetables have high demand for culinary uses, most specifically with Asian cuisines. They were identified as priority commodities because of their potential for value-adding opportunities as well as their satisfactory production performance. Demands for fresh lowland vegetables as well as value-added products are increasing since people are now opting for a healthier food product. The large increasing market demand coming from Metro Manila is likewise a good opportunity to seize (HVCDP, 2022).

b. Layer

Poultry (meat and egg) is the most progressive animal enterprise in the Philippines today with average growth rate of 3.5% at 2018 constant price. Chicken eggs contributes 3.3% in the country's output as per PSA in 2017. It is an industry that has grown and is continuously growing. The growth has even been carried out up to 2022. It has met the four criteria under global food security index, which are available, affordable, safe and resilient (BAI, 2022).

Food is becoming expensive due to increasing cost of production, growing demand and market inefficiencies, and egg could be a solution. Good nutrition is a foundation for economic prosperity, but in the Philippines, undernutrition is, and has always been, a serious problem. Nutritionally and economically, the egg has always been unbeatable. Now is the perfect time to promote eggs as an affordable, nutritious, and low impact food source (Chitturi, 2022). Egg industry leads to a healthier Philippines and a better food system. It is also relatively small compared to crops, swine, broiler and fisheries but is more inclusive in terms of number of commercial farmers, cooperatives and large industry partners (BAI, 2022).

Broiler c.

The poultry sector continues to grow and industrialize in many parts of the world. An increasing population, greater purchasing power and urbanization have been strong drivers of growth. The Philippine broiler industry must be part of this growth considering that the human population has increased, and that poultry is a cheap source of protein. The data and background on the Philippine broiler industry have grown modestly but have still not gone into exports due to market policies and animal health challenges that beset the industry (BAI, 2022).

Chicken demand increased faster than other meats due to its affordability, lower fat content, and cultural and religious acceptability as a preferred meat in fast food outlets, which is a quickly expanding sector throughout the Philippines (BAI, 2022). Broiler chicken attracts consumers because of its characteristics such as fast growth rate, early feathering, higher qualifications of feed conversion, and eligible flesh color (Bessei, 2006).

3. PRIMARY PLAYERS

The government is taking steps to encourage farmers and fisherfolk to come together and form clusters, primarily through cooperatives or group enterprises. This is a response to the challenges of improving productivity and accessibility, especially since most government support is directed towards cooperatives and organized groups. This approach also aims to simplify operations, making collaborative efforts more effective and efficient.

Lowland Vegetables

Table 5. List of Buyers/Processors of Vegetables, 2021

Buyers	Location	
GERRY'S GRILL & ARESI GROUP OF RESTAURANTS	75-C Baler St. San Francisco Del Monte, Quezon City	
GLOBAL FOOD SOLUTIONS, INC	Brgy. San Nicolas, San Pablo City, Laguna	
LION COMMERCIAL CORPORATION	1515 Pampanga St. Tondo Manila	
SKYKITCHEN PHILIPPINES, INC.	Gate 2 Pol Inflight Center Balteo St. Corner Mia Road, Pasay City	
UBM Corporation	312, Shaw Boulevard, Mandaluyong, 1552 Metro Manila	

Source: DA-4A AMAD

Table 6. List of Buyers/Processors of Vegetables, 2021

Province	Trading Area	Location
Cavite	Kadiwa Market	Dasmariñas, Cavite
Laguna	Laguna Agricultural Trading Center (LATC)	Calauan, Laguna
Batangas	Tanauan City Trading Post	Tanauan City, Batangas
Quezon	Sentrong Pamilihan ng Produktong Agrikultura sa Quezon	Sariaya, Quezon

Aside from the mentioned trading areas in Table 6, there are also other areas where trading of lowland vegetables happens in the region. In Cavite, they usually trade their consolidated vegetables in the Tanza public market. In Laguna, aside from the LATC, they also trade most of their tomato produce in the Siniloan Public Market, at the Areza Public Market in Pagsanjan, at the Rizal Public Market, and in Tanauan City and Sariaya, Quezon. Meanwhile, in Rizal, the major market destinations for lowland vegetables and other agricultural products are Cogeo Public Market in Antipolo, as well as Tanay Public Market (HVCDP, 2022).

There are also Municipal and Barangay Food Terminals, and other small-scale vegetable retail stores throughout the region. The DA also facilitates KADIWA retail selling with the KADIWA FCA beneficiaries.

The trading of lowland vegetables in CALABARZON is done by both local traders and viajeros. Their primary role involves assembling produce from farmers or consolidating those from major producing areas. Local traders are those who operate within their local community, while viajeros go beyond their locality to buy and sell products.

Layer and Broiler b.

The table below shows the total number of registered chicken meat and egg producers in CALABARZON as of October 2023, in the Farmers and Fisherfolk Enterprise Development Information System (FFEDIS) established under the Sagip Saka Act. It provides a general view of the size of the broiler and layer industry in the region, but does not show the current number of operational enterprises.

Table 7. List of Chicken Meat and Chicken Egg Producers in CALABARZON

Province	Chicken (Live)	Chicken (Dressed)	Chicken (Egg)
Cavite	4	2	3
Laguna	9	2	6
Batangas	10	7	34
Rizal	1	2	2
Quezon	6	3	9

Source: FFEDIS (October 2023)

Table 8. List of Egg Processors

Name of Association	Location	End Products
Batangas Egg Producers Multi-Purpose Cooperative	San Jose, Batangas	Pasteurized Eggs (chilled and Frozen) Ready-to-Eat Eggs Dried Egg Products
NovoAgri	San Jose, Batangas	Pasteurized Eggs Chilled Egs

Source: DA-4A PRDP (2018)

Support c.

Various government projects, programs and training/capacity building services are available to support agri-preneurs in establishing successful agri-enterprises. These initiatives provide agri-preneurs with essential resources, knowledge and support to enhance their skills, productivity and competitiveness in the agribusiness sector.

Table 9. List of DA-Provided Support and Who can Avail Them

TYPE OF SUPPORT PROVIDED	NAME OF PROGRAM AND PROVIDER	WHO CAN AVAIL
Input Provision and Production Support	High Value Crops Development Program (DA HVCDP)	Individuals and duly-registered farmer groups
Marketing and Distribution Support	KADIWA Retail Selling (DA AMAD)	Farmer Producers
	Farmer Produce Project (DA, SM and Resto PH)	
Financial Support	KADIWA Financial Grant Assistance (DA AMAD)	Farmer and fisherfolk organizations/associat ions, LGU,
	SURE COVID 19 for Micro and Small Enterprises (DA ACPC)	duly-registered agrifishery-based MSEs, SUCs, and young agripreneurs
	Agri-Negosyo Loan Program (DA ACPC)	young agripi eneurs
	Young Agripreneurs Loan Program (DA ACPC)	
	Young Farmers Challenge Program (DA AMAD)	

For MSEs, organizations and associations, the basic requirements that must be submitted to avail of the listed supports are letter of intent, a board resolution, copy of registration documents, endorsement letter from DA, and proof of registration on FFEDIS. Other requirements may include a copy of latest audited financial statement with proof of filing with BIR, farmer profiles and certificate of availability of the counterpart.

For young agripreneurs interested to be a beneficiary of the Young Agripreneur Loan Program or Young Farmers Challenge Program, basic requirements include a government-issued ID with picture, business plan or a Business Model Canvas for the YFC program, RSBSA registration and endorsement from the DA. Other requirements may include a loan application form and authority to use land.

FARMERS & FISHERFOLK ENTERPRISE DEVELOPMENT INFORMATION SYSTEM (FFEDIS)

The FFEDIS is a web-based information system which aids in developing enterprise plans, facilitating market connections, and securing resources for further enterprise growth. It is established under the Republic Act 11321, also known as the Sagip Saka Act.

Agri-fishery enterprises owned and operated by a farmer or fisherfolk or by group/organization of farmers/fisherfolk may register to FFEDIS. Registration to it will allow enterprises to avail of the different programs and projects of the Department of Agriculture, such as market linkage, loan program, grant program, trainings, technology transfer, subsidy program and more.

Source: Department of Agriculture's Farmers and Fisherfolk Enterprise Development Information System (FFEDIS) Registration Brochure

THE BUSINESS

A. BUSINESS REGISTRATION

All enterprises, regardless of their size, type, and form, are mandated by the government to obtain a permit before conducting business operations. Failure to register an enterprise result in being excluded from the formal economy. Unregistered businesses often operate within the underground economy and face limitations in accessing support and assistance programs. Registering your business opens doors to various opportunities provided by the government and private institutions, aimed at assisting aspiring agripreneurs.

Table 10. List of Documentary Requirements for Business Registration, and their Validity

Type of Business	Business Documents	Requirements	Validity
Sole Proprietorship	DTI Business Name Registration Certificate	Valid ID (Owner/ Proprietor)	The business name registered with DTI remains
	Barangay Business Permit Business Permit	Application Form Proof of Address	valid for a period of five (5) years.
	from the Mayor BIR Registration (if applicable)	Tax Identification Number (TIN)	

Table 10. List of Documentary Requirements for Business Registration, and their Validity (Continued)

Type of Business	Business Documents	Requirements	Validity
Partnership/ Corporation	SEC Registration (for partnership)	Valid IDs (Partners/ Officers)	The registration
	SEC Registration (for corporation)	Article of Partnership/ Incorporation	will have a validity of two (2) years.
	Business Permit from the Mayor	By-Laws of the Corporation/ Partnership	
	BIR Registration (if applicable)	Treasurer's Affidavit	
	Other Relevant Government Permits	Community Tax Certificate	
Cooperative	CDA Registration	Cooperative Development Plan	An original accreditation
	Articles of Cooperation	By-Laws of the Cooperative	is valid for five (5) years from the date of
	Business Permit from the Mayor	List of Members and Contributions	approval
	BIR Registration (if applicable)	Treasurer's Affidavit	
	арріїсавіє)	Community Tax Certificate	

B. INVESTMENT INCENTIVES

Cavite		
Priority Areas	High-value crop production, multi-cropping, post-harvest facilities, fruit/meat processing, feed meal, coffee production, aquaculture	
Fiscal Incentives	Under R.A. No. 7160, R.A. 7916, E.O. 226, and other pertinent laws, a registered enterprise under these codes shall enjoy the following tax incentives:	
	Exemption from the Real Property Tax (RPT) imposed under the 2004 Revised Revenue Code of the Province of Cavite, for a period of seven (7) years from the date of approval of registration by the Cavite Investment Board or from the date of expiration of the registered enterprise's tax exemption as provided under other national laws, whichever is applicable; and that the exemption shall pertain to the 35% share from the RPT of the provincial government.	
Non-fiscal Incentives	Registered enterprises or investors shall be granted the following non-fiscal incentives:	
	 Provision of one-stop documentation center for simplified documents procedures 	
	 Consistent support for industrial peace through Cavite Investment Promotion Center 	
	 Assistance in securing direct source of electric power and water supply connection 	
	 Assistance in negotiation of special rates for industries with a minimum load of at least 1,000 kilowatts 	
	 Assistance in site selection and negotiation for right of ways 	
	 Assistance in labor recruitment and arbitration 	
	 Assistance in coordinating with the Bureau of Immigration and Bureau of Customs 	
	 Other non-fiscal incentives as may be determined by the board 	

Laguna	
Priority Areas	High-value crops, post-harvest facilities, organic agriculture, aquaculture, herbal medicine
Fiscal Incentives	10% discount on Real Property Tax for On-time payment for the 1st Quarter
Non-fiscal Incentives	 Assistance on labor recruitment and agreement Assistance on site selection and right of way of negotiation Anti-Red Tape Act implementation Assistance in securing direct source of electric power and water supply connection "One-Stop-Shop" processing of Business License and other permits

Batangas	
Priority Areas	Poultry and egg, feeds and livestock, cattle and dairy, aquaculture
Fiscal Incentives	Cities and municipalities in Batangas have their own investment incentives for newly registered businesses based on their respective local revenue codes. These incentives are in the form of exemptions or percentage discounts from payment of Real Property Taxes which are given to registered enterprises during the first few years of their operation.
Non-fiscal Incentives	Each local government unit (LGU) has its own Business Permit and Licensing Office (BPLO) to facilitate the issuance and renewal of business permits and licenses. These offices aim to efficiently serve the people applying for permits and assist each LGU in generating income effectively. The existence of BPLOs create business-friendly environment raising the quality of public service.

Rizal	
Priority Areas	High-value commercial crop production, organic farming, fruit/meat/fish processing
Fiscal Incentives	Enterprises aligned with the priority investment areas of the province shall be exempted from the following for a period of five (5) years for small enterprises, eight (8) years for medium enterprises, and ten (10) years for large enterprises:
	 Taxes on Transfer of Real Property Ownership
	 Taxes on the Business of Printing and Publication
	● Franchise Taxes
	Amusement Taxes
	 Taxes on every delivery truck or van
Non-fiscal Incentives	Small, medium, and large enterprises:
incentives	 One-stop documentation for simplified registration procedure
	 Assistance in resolving issues and concerns and networking with NGAs, NGOs and other service providers
	 Assistance in securing electric power and water supply connection
	 Coordination in the negotiation of special rates for utilities for industries with certain minimum load, if feasible
	 Assistance in site selection and negotiation for right of way
	 Identifying and sourcing of skilled human resources Facilitation of outbound and inbound mission of investors
	 Other aftercare services that may be accorded to investors

Quezon	
Priority Areas	High-value crop production, post-harvest facilities, feedmill, food precessing, fishery and aquaculture
Fiscal Incentives	Local Business Tax
Non-fiscal Incentives	 Anti-Red Tape Act Implementation Presence of Public-Private Partnership Framework Consistent support for peace and order Other services that may be rendered to investors

Source: DTI IVA (Dec. 2020)

Enterprises registered with the Board of Investments (BOI) are also entitled to fiscal and non-fiscal incentives under the Omnibus Investment Code of 1987, as amended by the CREATE law.

Fiscal Incentives	 Income Tax Holiday (ITH) for 4-7 years depending on location and industry. After the ITH period, a domestic market enterprise can avail of Enhanced Deductions (ED) for five years. VAT exemption on imports and zero percent VAT on local purchases of goods and services that are directly and exclusively used in the registered project or activity. Customs duty exemption on imports of capital equipment, raw materials, spare parts and accessories directly and inclusively used in the registered project or activity. Exemption from all local government imposts, fees, licenses and taxes during the original ITH period.
Non-fiscal Incentives	 Unrestricted use of consignment equipment. Employment of foreign nationals. Simplified customs procedures. Access to bonded manufacturing warehouses.

Source: DTI IVA (Dec. 2020)

C. INVESTMENT COST

LOWLAND CROPS

Table 11. Summary of Cost and Return for Production of Selected Commodities per 1-hectare Land

Land	AMDALAVA	FCCDI ANT	CITAO
DETUDNI	AMPALAYA	EGGPLANT	SITAO
RETURN Yield/Cropping			
	1F F20 Ice	20,000 1/~	16.040 10
High	15,520 kg	28,060 kg	16,040 kg
Low Farm Gate Price	14,007 kg Php 50.00	25,324 kg	14,476 kg Php 40.00
Gross Sales	Pnp 50.00	Php 40.00	Php 40.00
	776 000 00	DI 1 100 100 00	DI 644 600 00
High	Php 776,000.00	Php 1,122,400.00	Php 641,600.00
Low	Php 700,350.00	Php 1,012,960.00	Php 579,040.00
COST			
Material Cost	Php 167,993.30	Php 53,688.00	Php 27,542.84
Labor Cost	Php 68,550.00	Php 81,300.00	Php 63,000.00
Post-harvest cost	Php 70,035.00	Php 121,555.20	Php 57,904.00
Total Cost of Production	Php 306,578.30	Php 256,543.20	Php 148,446.84
NET INCOME			
High	Php 469,421.70	Php 865,856.80	Php 493,153.16
Low	Php 393,771.70	Php 756,416.80	Php 430,593.16
RETURN ON INVEST	TMENT		
High	147.02	316.20	314.73
Low	128.44	204.05	290.07
LUW	128.44	294.85	290.07
LOW	SITAO	SQUASH	TOMATO
RETURN		<u> </u>	
		<u> </u>	
RETURN	SITAO	SQUASH	ТОМАТО
RETURN Yield/Cropping		<u> </u>	
RETURN Yield/Cropping High	SITAO 24,200 kg	SQUASH 12,700 kg	TOMATO 20,900 kg
RETURN Yield/Cropping High Low	24,200 kg 21,841 kg	12,700 kg 11,462 kg	20,900 kg 18,862 kg
RETURN Yield/Cropping High Low Farm Gate Price	24,200 kg 21,841 kg	12,700 kg 11,462 kg	20,900 kg 18,862 kg Php 75.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales	24,200 kg 21,841 kg Php 50.00	12,700 kg 11,462 kg Php 50.00	20,900 kg 18,862 kg
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High	24,200 kg 21,841 kg Php 50.00	12,700 kg 11,462 kg Php 50.00	20,900 kg 18,862 kg Php 75.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00 Php 109,205.00	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00 Php 33,750.00	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00 Php 169,758.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of Production	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of Production NET INCOME	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00 Php 109,205.00 Php 260,383.84	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00 Php 33,750.00 Php 151,980.20	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00 Php 169,758.00 Php 332,478.24
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of Production NET INCOME High	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00 Php 109,205.00 Php 260,383.84	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00 Php 33,750.00 Php 151,980.20 Php 483,019.80	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00 Php 169,758.00 Php 332,478.24 Php 1,235,021.76
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of Production NET INCOME High Low	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00 Php 109,205.00 Php 260,383.84 Php 949,616.16 Php 831,666.16	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00 Php 33,750.00 Php 151,980.20	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00 Php 169,758.00 Php 332,478.24
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of Production NET INCOME High	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00 Php 109,205.00 Php 260,383.84 Php 949,616.16 Php 831,666.16	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00 Php 33,750.00 Php 151,980.20 Php 483,019.80	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00 Php 169,758.00 Php 332,478.24 Php 1,235,021.76
RETURN Yield/Cropping High Low Farm Gate Price Gross Sales High Low COST Material Cost Labor Cost Post-harvest cost Total Cost of Production NET INCOME High Low	24,200 kg 21,841 kg Php 50.00 Php 1,210,000.00 Php 1,092,050.00 Php 71,078.84 Php 80,100.00 Php 109,205.00 Php 260,383.84 Php 949,616.16 Php 831,666.16	12,700 kg 11,462 kg Php 50.00 Php 635,000.00 Php 573,100.00 Php 51,630.20 Php 66,600.00 Php 33,750.00 Php 151,980.20 Php 483,019.80	20,900 kg 18,862 kg Php 75.00 Php 1,567,500.00 Php 1,414,650.00 Php 87,120.24 Php 75,600.00 Php 169,758.00 Php 332,478.24 Php 1,235,021.76

Assumptions:

- 1. The computation does not account for the cost of land, as it is presumed to be owned by the person investing.
- 2. Prices used for computation are based on July 2023 prices.
- 3. The yield data was taken from the Value Chain Analysis of Lowland Crops released by DA CALABARZON under PRDP in 2019.
- 4. To acknowledge the uncertainties during production, both high and low yield assumptions were included to identify the impact of varying yields on potential income and return on investment.

2. LAYER AND BROILER

Table 13. Summary of Cost and Return of Egg Production

Module: 3,000 heads (based on a 1-year projected income statement)		
CAPITAL INVESTMENT		
Stock (Day-old chick: Php35/bd; egg production -		
70% in a year)	Php 105,000.00	
Housing (semipermanent type, 0.2 sq.m./bd;		
Php1,500/sq.m.)	Php 1,035,000.00	
COST AND RETURN		
Feeds (Php24/kg; feeding period: 365 days, average		
daily feed consume: 110g)	Php 2,890,800.00	
Labor Cost (1 laborer, Php400/day)	Php 146,000.00	
Utilities (Php1,000/cycle)	Php 12,000.00	
Housing depreciation (life: 20 years)	Php 51,750.00	
Total Production Cost	Php 3,100,550.00	
Total Investment Cost	Php 4,188,800.00	
Good Eggs (788,480 eggs, 90% of total eggs;		
Php6.50/pc)	Php 5,124,600.00	
Broken Eggs (87,600 eggs, 10% of total eggs; Php5/pc)	Php 438,000.00	
Culled (95% of total population of layer chicken -		
2,850 hds; Php100/bd)	Php 285,000.00	
Total Revenue	Php 5,847,600.00	
Net Profit	Php 2,747,050.00	
ROI	65.58%	

Table 14. Summary of Cost and Return of Broiler Production

Module: 5,000 heads (7 cycle) (based on a 1-year projected income statement		
CAPITAL INVESTMENT		
Stock (Day-old chick; Php35/bd)	Php 1,225,000.00	
Housing (semipermanent type, 0.23sq.m. Php1,224/sq.m.)	Php 1,407,600.00	
COST AND RETURN		
Feeds (per kg: booster-Php30 starter-Php28, grower-Php25 and finisher-Php18); feeding period: 32 days, average daily feed consume (booster-25g,		
starter-80g, grower-110g and finisher-120g)	Php 2,462,209.82	
Labor Cost (1 laborer, Php400/day)	Php 89,600.00	
Utilities (Php3,000/cycle)	Php 21,000.00	
Biologics and medicines	Php 49,244.20	
Brooder cages, feeder and waterer	Php 150,000.00	
Housing depreciation (life: 20 yrs)	Php 70,380.00	
Total Production Cost	Php 2,842,434.02	
Total Investment Cost	Php 5,404,654.02	
Sales for live broiler chicken (4,851 hds; Php92/kg; weight: 1.5 kg)	Php 4,686,066.00	
Total Revenue	Php 4,686,066.00	
Net Profit	Php 1,843,631.98	
ROI	34.11%	

References

- BAI. (2022). Based on Per Capita Consumption. Philippine Poultry Broiler Industry Roadmap 2022-2040. Department of Agriculture - Bureau of Agricultural Research
- BPI. (2013, January). The Pole Sitao Plant. Pole Sitao Production Guide. Department of Agriculture - Bureau of Plant Industry.
- Bureau of Trade and Industrial Policy Research. (2020, December). CALABARZON Regional Trade and Investment Report. Department of Trade and Industry (DTI).
- Cabuenas, I. V. (2023). PSA: Western Visayas fastest-growing region in 2022. GMA Retrieved Integrated News. lune 2023 from https://www.gmanetwork.com/news/money/economy/868310/psa-western-vis ayas-fastest-growing-region-in-2022/story/
- Cayon, M. (2023). 4 in 5 solved: Crime resolution in PHL remains efficient PNP. BusinessMirror.
- DA RFO No. 02. (2017, February). Introduction. Ampalaya Production Guide. Tuguegarao City, Cagayan: HVCDP and RAFIS.
- DA RFO No. 02. (2017, February). Introduction. Squash Production Guide. Tuguegarao City, Cagayan: Department of Agriculture - HVCDP and RAFIS.
- DA RFO No. 2. (2017, February). Adaptation. Tomato Production Guide. Tuguegarao City, Cagayan: Department of Agriculture - HVCDP and RAFIS.
- HelgiLibrary. (2023, July 23). Egg Consumption per Capita in Philippines. Retrieved August
 - 15, 2023. from HelgiLibrary: https://www.helgilibrary.com/indicators/egg-consumption-per-capita/philippin es/
- HVCDP. (2022). Crop Suitability: Description, Planting, and Cultivation Practices. Philippine
 - Vegetable Industry Roadmap 2021-2025. Department of Agriculture Bureau of Agricultural Research.
- Mapa, D. S. (2021, July 7). 2020 Census of Population and Housing (2020 CPH) Population

Counts Declated Official by the President. Philippine Statistics Authority (PSA). Retrieved 2023, from July http://psa.gov.ph/content/2020-census-population-and-housing-2020-cph-po pulation-counts-declared-official-president

- NEDA. (n.d.). Updated Philippine Development Plan 2017-2022. Pasig City: National Economic and Development Authority (NEDA). Retrieved July 9, 2023 from https://pdp.neda.gov.ph/wp-content/uploads/2021/02/Pre-publication-copy-U pdated-PDP-2017-2022.pdf
- Neves, M. F. (2022, June 24). PHILIPPINE ROADMAP 2022-2040. Philippine Council for Agriculture and Fisheries -. Retrieved August 3, https://www.pcaf.da.gov.ph/wp-content/uploads/2022/06/Philippine-Poultry-La yer-Industry-Roadmap-2022-2040.pdf
- NIA IV-A. (2023). Overview. Retrieved July 9, 2023 from National Irrigation Administration (NIA) - Region IV-A: https://region4a.nia.gov.ph/?q=content/overview
- PRDP. (2018, October). Value Chain Analysis: Chicken Eggs CALABARZON.
- PRDP. (2019, April). Value Chain Analysis: Lowlan Vegetables CALABARZON.
- PSA. (2023, February 22). Philippine Statistics Authority. Retrieved August 12, 2023, from FINAL RESULTS Volume of Poultry Production in Central Luzon January to December 2022: rss03.psa.gov.ph/sites/default/files/2023-SRLP-2022-024.pdf
- RDC IV-A. (2023). CALABARZON Regional Development Plan 2023-2028. Calamba City, Laguna: National Economic Development Authority Region IV-A.
- Statista. (2023). Eggs Philippines. statista.com. Retrieved September 12, 2023, from https://www.statista.com/outlook/cmo/food/dairy-products-eggs/eggs/philippi nes
- Sub Task Group on Agribusiness Secretariat. (2020, December). Agribusiness Portfolio. Department of Trade and Industry (DTI).
- Tababa, J. (2023, June 6). June Planting Calendar. Manila Bulletin.





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