

Village-Level Multi-Purpose Feed Mill

Project Description

The Province of Guimaras is the fastest-growing economy in Western Visayas, with a 7.7 percent growth rate in 2021, the highest among six provinces. It holds the ingredients to grow your investment, especially in Agriculture, Fisheries, and Forestry (AFF), a sector that contributed 2.1 percent to its overall growth (PSA, 2021).

Corn and Coconut are among the top agricultural commodities produced by the province. These commodities are utilized mainly as animal feeds. In 2022, corn production accounted for 1,981.82 metric tons with a total harvested area of 623.66 hectares while coconut production accounted for 42,679.30 metric tons and area harvested at 9,297 hectares. The demand for the highly valued commodities such as livestock, poultry and aquaculture continues to increase as evident in the value of production 2021 in agriculture and fisheries which poses an increase of 10.28% at current price. This includes increases in livestock (21.79%), poultry (4.38%) and fisheries (16.06%). (*DA Agricultural Performance, 2021*).

The establishment of a village-level multi-purpose feed mill will mutually benefit investors and the host community to further develop its livestock, poultry, and aquaculture commodities. As an identified investment area in Guimaras, the project is included in planning of the Multi-Year Agri-Fishery Industrial Village (AgFIVA) Project of the Provincial Government. This will house the village feedmill, coco oil mill hub and other support facilities such as motorpool, flatbed dryer and greenhouse. Further, the project will provide high quality feed to support efficient animal production, promote locally-sourced alternative ingredients and improve the management of small and medium scale farmers.

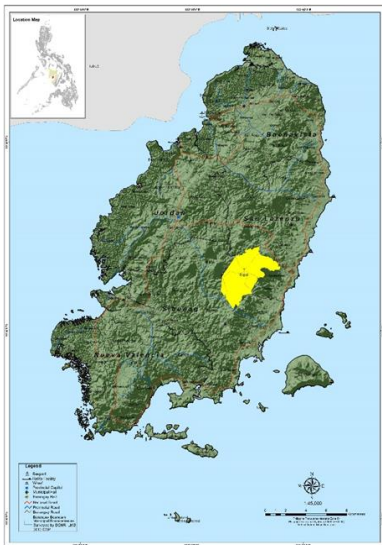
The project component will include: (1) construction of access road and perimeter fencing, (2) installation of electricity and water supply system and construction of first year facility feed mill, (3) construction of additional facilities and operationalization/ maintenance of the facilities (4) additional support facilities that will be constructed and (5) operationalization and maintenance of the established Guimaras Village Level Multi-Purpose Feedmill.

Constraints that can be addressed through the establishment of the project are limited access to modern technologies, equipment and training. Furthermore, the unutilized upland agricultural lands limit the access to market these locally produced feed grain and commercially available livestock, poultry, and aqua feeds.

Target Market/Clients

A total of 22,426 individual farmers and fisherfolks, listed in the RSBSA 2021 and 3,568 livestock raisers were identified as target beneficiaries of the Village-Level Multi-Purpose Feed Mill.

Through the establishment of this project, more employment opportunities will be available to Guimarasnons. Investors, on the other hand, will benefit from the reasonable pricing of feeds which currently prevails at Php 1,400.00 per 50 kilograms of feed.



Target Location

The project site is located at a two-hectare government-owned lot in Barangay Sapal, Municipality of San Lorenzo, Guimaras.

Benefits

The project has an estimated gross profit of P26 million over a P50 million investment and a payback period of more than a year.

Investment Requirements

<i>Construction and Concreting of Access Roads</i>	<i>P 6,000,000.00</i>
<i>Construction of Perimeter Fence</i>	<i>P 2,500,000.00</i>
<i>Installation of Electricity and Water Supply System</i>	<i>P 8,000,000.00</i>
<i>Machines/ Equipment**</i>	<i>P 3,750,000.00</i>
<i>Raw Materials***</i>	<i>P 6,750,000.00</i>
<i>Other Operating Expenses</i>	<i>P 8,000,000.00</i>
<i>Estimated Project Cost</i>	<i>P 50,000,000.00</i>

Assumptions:

*The Investment Requirements will only include Phase 1 of the Project

**Feed Mill will be purchased with 1,500 kgs production capacity per day

***Raw materials include Corn bran, rice bran, green papaya, banana stalks, Ipil-Ipil leaves, cassava, coconuts, Azolla, and molasses with small percentage of lemongrass, langkawas and cooked taro roots

Profitability

<i>Machine Production Capacity Per Day (in kgs)*</i>	<i>4,000</i>
<i>Machine Efficiency Rate</i>	<i>80%</i>
<i>Feed Production Per Day in kgs</i>	<i>3,200</i>

<i>Feed Production in Year 1 in kgs</i>	<i>960,000</i>
<i>Prevailing Price of Feed per Sack**</i>	<i>P 1,400.00</i>
<i>Number of Operating Days</i>	<i>300</i>
<i>Estimated Gross Profit</i>	<i>P 26,880,000.00</i>
<i>Assumptions:</i>	
<i>*Machine Production is 8 hours of full operation at 500 kilograms per day</i>	
<i>**1 sack is equivalent to 50 kgs of feed</i>	
Rate of Investment	(46.24%)
Payback Period	1.9 Years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements thru:

- Funding support for the management of the facility;
- Provision of machineries; and
- Buy the product.

Accredited Swine Breeder Farm

Project Description

The Province of Guimaras' is driven by small-scale backyard farming. In 2022, it was able to export 11,737 hog heads out of a total of 24,200 hog heads produced. This contributed to 2.06 percent of the regional swine growth in Western Visayas (Western Visayas Hog Situationer, 2022).

Swine breeder farms are lucrative businesses because of the short gestation period (pregnancy) of four months for a mature female pig (sow), which can give birth (farrow) between 8 and 12 piglets at a time and at least twice a year (PennState Extension, 2021).

There are two types of pork meat consumers: institutional clients like hotels, resorts, restaurants, eateries, carinderias, and lechon merchants. Clientele rely on direct supply from traders operating meat stalls at the public market. Then household consumers buy meat for daily consumption from retail sellers and vendors in the market.

Given the provinces' recorded visitors arrival in 2022 at 645,866 and the average consumption of pork in Western Visayas is estimated at 8.776 kgs per person, thus, an estimated 5,668 metric tons consumption demand of visitors for pork will be generated annually.

This investment is envisioned to resolve constraints such as limited local supply of corn; imported and expensive feed ingredients resulting in high costs of commercial feeds; the practice of swine-in breeding among backyard hog raisers; insufficient supply of good-quality stocks or piglets for breeding; and high price of good-quality piglets.

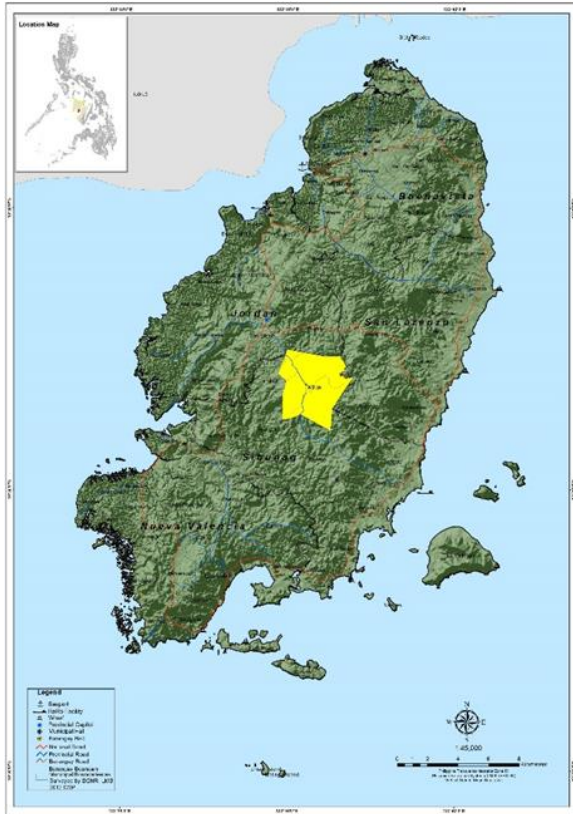
The project will ensure the sustainability of pork supply, improve quality of breeder stocks and meat that are free from diseases as an advantage being an island ecosystem and stabilize prices of pork in the province.

The swine production performance demonstrates the potential for scaling up swine production, offering a favorable condition for the establishment of accredited swine breeder farms, which will place Guimaras as a reliable producer of safe and healthy swine products for both domestic and regional markets.

Target Market/Clients

The project beneficiaries are among the 3,568 members of the livestock and poultry association. The project will also benefit the province in terms of quality stocks, disease-free meat that is safe for human consumption, stabilizing

pricing, which is currently at P130.00 per kilogram, boosting regional supply sufficiency considering per capita consumption at 8.77 kilograms, and providing employment. The venture will benefit the investor and have a payback period estimated at 1.75 years, presuming a farrowing rate of 75 percent.



Target Location

The proposed project site is at Sitio Cabungahan, Municipality of San Lorenzo, Guimaras.

Benefits

The estimated gross profit is P8.6 million over a P15 million investment and a payback period of 1.75 years.

Investment Requirements

<i>Land*</i>	<i>P 2,000,000.00</i>
<i>Building and Equipment</i>	<i>P 5,000,000.00</i>
<i>Live Stocks**</i>	<i>P 1,000,000.00</i>
<i>Feeds</i>	<i>P 1,000,000.00</i>
<i>Operating Cost and Maintenance</i>	<i>P 4,000,000.00</i>
<i>Estimated Project Cost</i>	<i>P 15,000,000.00</i>

Assumptions:

*Land estimated at Php 2,500/ sq m including amenities

**Live Stocks include a 100-Sow Level Production with 10 Boars

Note: Production System of this project will be Sow-Herd (designated to produce parent replacement gilts for the terminal portion of the herd) and farrow to finish (involves breeding and farrowing sows and feeding the offspring until they reach a market weight.)

Profitability

<i>Farrowing Rate*</i>	<i>75%</i>
<i>Average Prevailing Price of Live Pork per kg</i>	<i>P 130.00</i>
<i>Average Weight for Live Pork</i>	<i>110 kilograms</i>
<i>Average Piglets per Litter**</i>	<i>8</i>
<i>Production of Live Hogs per Year***</i>	<i>1,800</i>
<i>Breeding Cycle in Year 1****</i>	<i>1</i>
<i>Estimated Gross Profit in Year 1</i>	<i>P 8,580,000.00</i>

Assumptions:

**Farrowing Rate is the percentage of farrowings in respect to the sows that have been mated in a certain period of time*

***Usually, a sow will have 8 to 13 pigs per litter, but in this project average piglets per litter is 8.*

****The production of live hogs per year is assumed that only 75 out of 100 sows will conceive.*

*****Breeding Cycle is assumed at 1 cycle due to processing of necessary documents and construction of facilities. In the succeeding years, 2 breeding cycles will be used.*

Note: The life cycle of a market pig involves: (a) Gestation (Pregnancy) - 114 days, (b) Gilts reach maturity and are bred at 170 to 220 days of age, (c) Farrowing - 21 days, (d) Nursery - 42 to 56 days and (e) Growing and Finishing - 115 to 120 days

Rate of Investment	(42.8%)
Payback Period	1.75 Years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements and Direct Private Investment thru:

- Funding support for the construction of facilities;
- Provision of machineries; and
- Operating Expenses

Establishment of Coconut Oil Mill Hub

Project Description

Coconut is one of the top agricultural products of the Province of Guimaras. In 2022, it accounted for 46.7 percent of the total agriculture production, with a total production of 42,679.30 metric tons covering an area harvested of 9,297 hectares.

Guimaras is endowed by a highly-productive centenarian coconut species, *Cocos Nucifera*, which can produce 40 to 65 coconuts per tree annually between seven and 25 years old as its optimal productive years. Despite this, coconuts remain as an underutilized natural resource. With favorable agricultural policies, keen business skills, suitable farming methods, and appropriate technology coconuts possess the power to drive economic progress and alleviate poverty.

Mature coconuts are produced and processed into copra by farmers and sold to copra traders. Whilst the young nuts are usually sold into juice or shakes in the market.

Developing copra into a significant value-added product offers an investment opportunity for the establishment of a coconut oil mill hub, which can kickoff production of coconut oil, virgin coconut oil, coir or coconut fiber, and other merchandise. Coconut by-products have better price points on both domestic and foreign markets, considering the environmental sustainability, health benefits and natural beauty of the items.

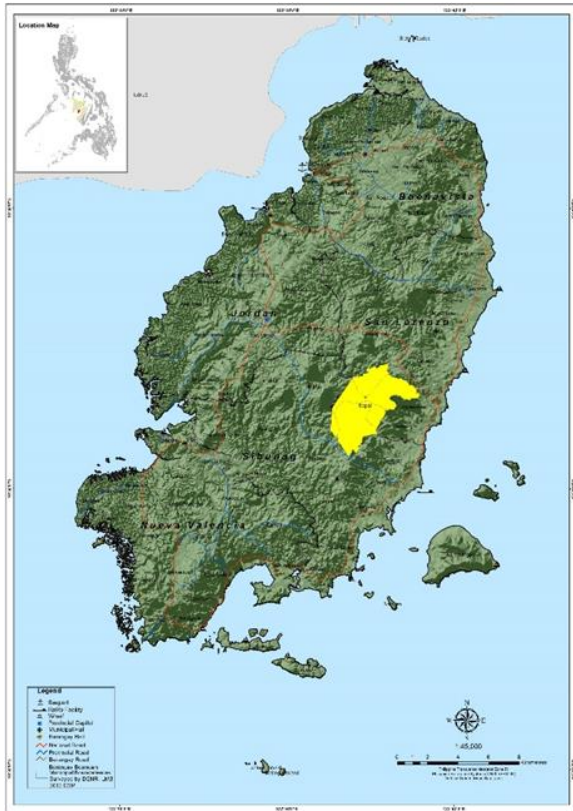
Investment need not start from zero because the province has private coconut nurseries, farmer's organizations, space for expansion of production, available technology, in-house capability for operations, and wholesalers and retailers.

The establishment of the coconut oil mill hub is one of the components of the Agri-Fishery Industrial Village (AgFIVA). The Phase 1 of the AgFIVA project include: 1) Construction and concreting of access roads; (2) Construction of perimeter fence; (3) Installation of Electricity and Water Supply System; and (4) Construction of 1st Year Facility – Village Level Feedmill.

The hub is included in the Phase 2 of the AgFIVA project along with the operationalization and maintenance of the feedmill. The phase 3 consisted of construction of support facilities (motorpool, dryer and greenhouse) and operationalization and maintenance of established AgFIVA.

The investment will help address the following constraints: lack of information on appropriate technologies for coconut farming, limited farm equipment, machinery, and tools, and aging coconut farmers. The investment is expected

to increase the number of units of copra dryers, upgrade tools for copra processing, develop by-products thereby creating livelihoods, and increasing the income of farmers.



Target Market

The investment will benefit 9,000 members of the Guimaras Coconut Farmers Agriculture Cooperative (GCFAC), a newly-registered people’s organization with a Cooperative Development Authority, with ar 30-year track record as a farmer’s federation.

Target Location

The proposed project site is at Barangay Sapal, Municipality of San Lorenzo.

Benefits

It will bring economic and social benefit to the community by providing employment opportunities to locals, such as researchers, technical staff, mill operators, transport, and security personnel. It will also allow capacity building for technical training and equipment support. The local government also stands to gain from the investment through taxes and economic activities that support the needs of people and the community where the oil mill operates.

A high profit margin is expected with an estimated gross profit of P31 million over a P25 million investment and a less than one-year payback period.

Investment Requirements	
<i>Building, Equipment and Machinery*</i>	<i>P 10,000,000.00</i>
<i>Transportation/ Logistics</i>	<i>P 5,000,000.00</i>
<i>FDA Permits</i>	<i>P 300,000.00</i>
<i>Packaging and Labelling</i>	<i>P 300,000.00</i>
<i>Operating Cost and Maintenance</i>	<i>P 4,400,000.00</i>
Estimated Project Cost	P 25,000,000.00

Assumptions:

*The project will be house in the Phase 2 of Agri-Fishery Industrial Village Project (AgFIVA)

Profitability	
<i>For Cooking Oil</i>	
Machine Capacity per Day	5,000 kgs
Production Efficiency Rate*	80%
Number of Operating Days in Year 1**	150
Production per year in liters***	9,000,000
Average market price per liter	P80.00
Estimated Gross Profit for Cooking Oil	P 28,800,000.00

Assumptions:

*Production Efficiency Rate is calculated by comparing the actual output rate to a standard output rate

**First 6 months of the project will involve construction of facilities and procurement and processing of necessary documents and purchase of machine/s. Succeeding years will involve 300 days operation at 8 hours full operation per day.

***The 5,000 kgs of Copra is equal to 20,000 nuts and 1 kg of copra will be converted to 0.6 liter of coconut oil

<i>For Virgin Coconut Oil (VCO)</i>	
Production of VCO per month in liters*	520
Machine Efficiency Rate	80%
Production of VCO per Year	4,992 liters
Average market price per liter	P 800.00
Estimated Gross Profit for VCO	P 1,996,800.00

Assumptions:

*The 100 kilograms of copra is equal to 40 liters of VCO

Total Estimated Gross Profit Per Year	P 30,796,800.00
Rate of Investment	23.19%
Payback Period	0.81 years

Preferred Investment Modality:

Public-private partnerships through Joint Venture Agreements and Direct Private Investments thru:

- Operations Management of the facility
- Technology Support (Machineries)

Upgrading to National Meat Inspection Services-Certified “AA” Abattoir

Project Description

The Municipality of Buenavista in the Province of Guimaras exhibits the potential for the establishment of an "AA" abattoir with the highest number of farmers engaged in livestock raising at 28.7 percent of the total population and with swine being the largest livestock industry in the province with 24,200 heads produced in 2022.

Likewise, in 2022, the Western Visayas region was the second-largest hog producer in the country, and it recorded improved performance, attaining 7.8 percent growth or 1,126,462 hog heads produced in the first quarter of 2023. Guimaras occupies a bright spot with increased production of 0.37 percent in 2021 to 2.06 percent in 2022, highlighting the need to upgrade and expand the Buenavista Slaughterhouse into an "AA" abattoir certified by the National Meat Inspection Services (NMIS).

Major constraints that will be addressed by the establishment of this project are the insufficient number of “A” abattoirs and lack of “AA” accredited abattoirs and slaughterhouses, lack of cold storage facilities and competent butchers in slaughterhouses.

The upgrading and expansion of the Buenavista Slaughterhouse from 135 square meters to a 217 square meters “AA” abattoir will require redesign, rehabilitation, and expansion. This will cover the integration of cold storage facilities and the upgrading and mechanization of the system, finance, and maintenance operations. This will increase the production volume pegged at 45 heads per day.

Target Market

The project beneficiaries are among the 3,568 members of the livestock and poultry association. The investment will improve the social and economic well-being of farmers and livestock raiser beneficiaries and ensure safe, clean, and disease-free animal meat for domestic and regional consumers. Investors will likewise gain revenues from the fees of abattoir operations, namely: slaughterhouse and slaughter fee, corral fee, meat cutting and processing, hauling, cold storage, and meat delivery.



Target Location

The proposed project site is at Barangay Tastasan, Municipality of Buenavista, Guimaras.

Benefits

The project has an estimated gross profit of P10.8 million over a P30 million investment and a payback period of more than 2 years.

Investment Requirements	
<i>Building, Machineries and Equipment</i>	<i>P 20,000,000.00</i>
<i>Cold Storage Facility</i>	<i>P 7,000,000.00</i>
<i>Refrigerated Van</i>	<i>P 2,000,000.00</i>
<i>Operating Cost</i>	<i>P 1,000,000.00</i>
<i>Estimated Project Cost</i>	<i>P 30,000,000.00</i>
Profitability	
<i>Target Number of Heads to be slaughtered per day</i>	<i>45</i>
<i>Slaughter Fee Per Head</i>	<i>P 800.00</i>
<i>Number of Operating Days</i>	<i>300</i>
<i>Estimated Gross Profit in Year 1</i>	<i>P 10,800,000.00</i>
Rate of Investment	(64%)
Payback Period	2.78 Years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements and Direct Private Investment thru:

- Operations and Management
- Technology Support

Mango Rehabilitation and Contracting Services

Project Description

The Province of Guimaras is widely known for its flagship commodity– the Guimaras mangoes. It is home to the “sweetest mango in the world” (Guimaras Super Galila). In 2023, the province was granted the first geographical indication (GI) registration by the Intellectual Property Office of the Philippines (IPO), because of the distinct taste and quality of Guimaras mangoes.

The production of mangoes increased by 5% in 2022, accounting for over 17,000 metric tons (MT) of mangoes produced over a 6,000-hectare harvest area in the province. As a prized commodity, there is an ongoing demand to continually and increasingly produce these highly reputable mangoes.

To increase the production yield of up to 300 kilograms for grafted mango and more than 500 fruits for centennial mango trees, there is a need to rehabilitate them. The rehabilitation project targets to rehabilitate 1,275 mango trees in the whole province. This is estimated to increase production of mangoes by 10-20%.

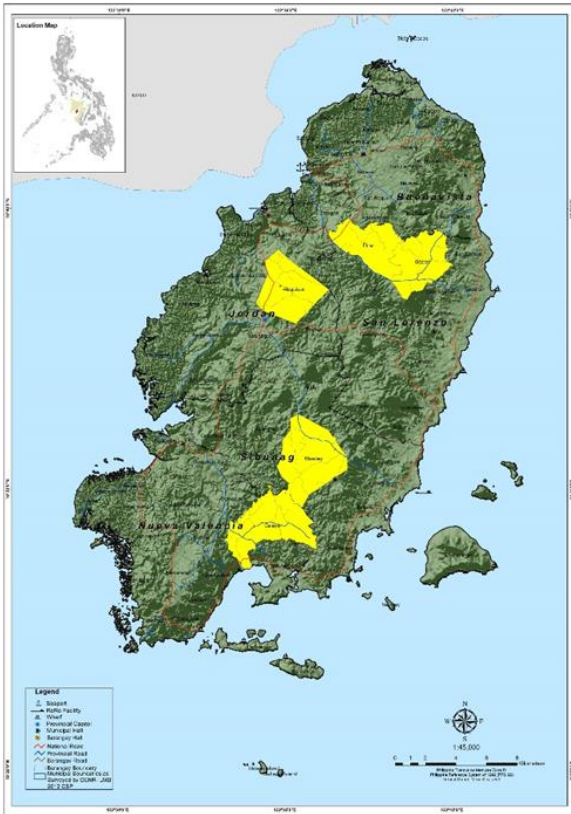
At present, there are five key areas for rehabilitation in each of the five municipalities in Guimaras wherein each area would need a capital investment of P30 million with an estimated gross profit of P17.8 million.

This project will address constraints identified on lack of mango tree rehabilitation efforts causing decrease in yield per tree and poor farm management and adoption of Good Agricultural Practices (GAP) in the province.

The required support in increasing production levels can benefit over 7,900 mango growers. Through joint ventures and other partnership mechanisms, investors and orchard owners can mutually benefit from the exchange of values that is foreseen to result in an increased production of good quality mangoes, generate employment, profitable returns, and overall improve the quality of life of Guimarasnons.

Target Market

The target market of this project are Mango Orchard owners in need of financial, technological and personnel support in the rehabilitation of Mango trees to increase their production.



Target Location

Each municipality is estimated to allot 5 hectares for mango rehabilitation. The identified areas that will undergo the tree rehabilitation process area:

- Brgy. Pina, Buenavista, Guimaras
- Brgy. Alaguisoc, Jordan, Guimaras
- Brgy. Calaya, Nueva Valencia, Guimaras
- Brgy. Gaban, San Lorenzo, Guimaras
- Brgy. Maabay, Sibunag, Guimaras

Benefits

A high profit margin is expected with an estimated gross profit of over P17 million over a P30 million investment and a payback period of 1.7 years, with the presumption that 70% the rehabilitated trees will respond to the flower

inducer applied.

Investment Requirements

<i>Rehabilitation Cost Per Tree*</i>	<i>P 5,000.00</i>
<i>Estimated Area for Mango Rehabilitation per municipality</i>	<i>5 hectares</i>
<i>Number of Trees per hectare</i>	<i>51</i>
<i>Estimated Rehabilitation Cost**</i>	<i>P 19,125,000.00</i>
<i>Operating Cost</i>	<i>P 10,875,000.00</i>
<i>Estimated Project Cost</i>	<i>P 30,000,000.00</i>

Assumptions:

*Rehabilitation cost for unproductive mango tree will include application of fertilizers and other farm inputs

**Rehabilitation period will be three (3) years.

Profitability

<i>Number of Trees to be Rehabilitated</i>	<i>1,275</i>
<i>Number of Trees that will respond to flower inducer*</i>	<i>892.5</i>
<i>Estimated number of mango fruit per tree</i>	<i>200 kgs</i>
<i>Farm Gate Price</i>	<i>P 100.00</i>
<i>Estimated Gross Profit</i>	<i>P 17,850,000.00</i>

Assumptions:

*The number of trees that will respond to flower inducers is estimated at 70%.

Rate of Investment	(40.5%)
Payback Period	1.7 Years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements and Contracting
Service Investors and Orchard Farm Owners thru:

- Operations and Management
- Technology Support

Ice Plant with Cold Storage for Fisheries

Project Description

The fisheries production in Western Visayas was estimated at 77,334 metric tons (MT) in 2022 with Guimaras contributing 1.69% in aquaculture, 2.76% in marine municipal fisheries, and 2.59% in inland municipal fisheries. This translates to an overall fish production of 7,844.54 metric tons for the whole province.

In 2021, aquaculture fishing consists of milkfish cultured from brackish water, fish ponds, fish cages and fish pens yielded 2,252.53 metric tons in 2021 contributing to an estimated 80.69% in the overall sector. Other aquaculture components are seaweeds (483.87 MT), tilapia (33.56 MT) and other species which include mud crab, oyster, catfish, white shrimp, prawn, spiny lobster, grouper accounted to 21.35 MT of the provincial total.

The Municipality of Sibunag hosts 176 units of fish cages/pens operated by the members of Sibunag Fish Producers Association (SIFPA) for nearly 2 years.

Despite this, challenges in support of aquaculture production such as lack of ice supply and cold storage facilities, impact the quality of fish products. To address this, a proposed investment of P25 million is needed for an ice plant with a cold storage facility. The project can be facilitated through joint venture agreements and partnerships, aimed to benefit over 16,000 fisherfolks in Guimaras. The investment would cover land acquisition, building construction, cold storage facility setup, ice crusher and delivery truck procurement, and other operational expenses. The establishment of the ice plant is set to earn an estimated annual gross profit of P9.9 million.

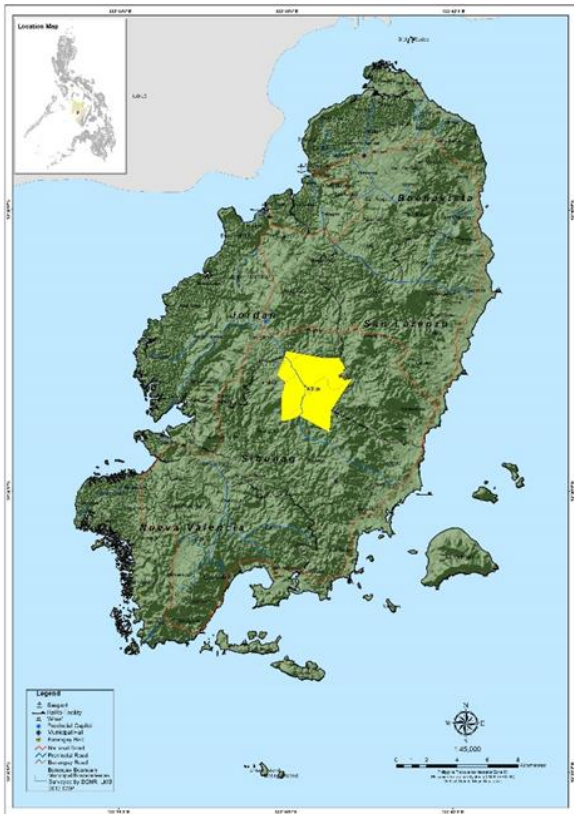
Target Market / Clients

The target market of the proposed facility is the Sibunag Fish Producers Association (SIFPA). An association with 80+ active fisherfolks and operates more than 170 fish cages and fish pens in the waters of Sibunag, Guimaras.

This will also benefit the different fisherfolk and fisherfolk associations in the province in need of the cold storage to prolong shelf life of their produce.

Target Location

The proposed facility is strategically located at Brgy. Millan in the Municipality of Sibunag, which has an abundant water supply source coming from the hills of Bontoc, Tigbi and Dinalman surrounding the area.



An alternative site option for the Ice Plant which also has access to rich water supply, is at Brgy. Sta. Teresa in the Municipality of Jordan.

Benefits

To establish the ice plant, the P25 million project is expected to have a shorter payback period and has an estimated gross profit of P9 million yearly, once it is fully operational.

Investment Requirements

<i>Land*</i>	<i>P 600,000.00</i>
<i>Building</i>	<i>P 6,000,000.00</i>
<i>Equipment</i>	<i>P10,000,000.00</i>
<i>Cold Storage**</i>	<i>P 1,000,000.00</i>
<i>Crusher (1 Unit)</i>	<i>P 65,000,000.00</i>
<i>Delivery Truck</i>	<i>P 800,000.00</i>
<i>Operating Expenses</i>	<i>P 6,535,000.00</i>
<i>Estimated Project Cost</i>	<i>P 30,000,000.00</i>

Assumptions:

*Lot acquisition of 300 square meters

**Cold Storage size is 4 x 6 meters with capacity of 100 blocks per day (24-hour operation)

Profitability

<i>Average fisheries production per day</i>	<i>7 tons</i>
<i>Cold Storage Capacity per Day*</i>	<i>100</i>
<i>Number of Operating Days</i>	<i>300</i>
<i>Price per Block</i>	<i>P 300.00</i>
<i>Estimated Gross Profit</i>	<i>P 9,900,000.00</i>

Assumptions:

*Given that the cold storage capacity per day is 100 blocks, the fish to ice ratio is 1:1 and 1 block is equivalent to 25 kilograms

Rate of Investment	(64%)
Payback Period	2.78 years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements and Direct Private Investment thru:

- Construction of Facilities and Provision of Machineries
- Operations and Management
- Technology Support (Machineries)

Bangus Production in Fish Pen and Fish Cages with High-density polyethylene (HDPE)

Project Description

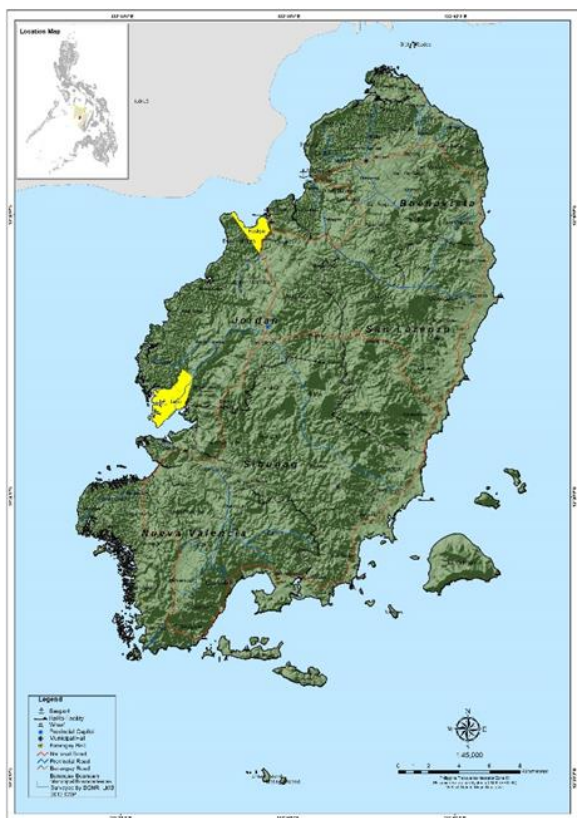
The Province of Guimaras envisions itself to be an agri-eco-tourism capital in the region. With over 22,000 farmers and fisherfolks in the region, the Agriculture, Hunting, Forestry and Fishery (AFF) sector is one of the major economic drivers of the province (34.1%). In Western Visayas, the province contributed at an estimated 1.69% in aquaculture fisheries in the region.

Aquaculture fishing consists of the milkfish cultured from brackish water, fish ponds, fish cages and fish pens which yielded 2,251.53 metric tons in 2021, contributing to an estimated 80.69% in the overall sector.

Major issues identified in the industry are underutilized/ underdeveloped fishponds and mariculture parks and improper aquaculture practices such as high density cages beyond its area's capacity and overfeeding.

Milkfish that are produced from aquaculture is one of the traded fish in the local market. The construction of fish cages and fish pens will greatly help in boosting Bangus production in the province which will result in improved income of fisherfolks and provide local employment.

With the increasing demand of milkfish, a sustainable supply of milkfish is vital to ensure sufficient contribution of Bangus in the local market, and provide food security especially for the growing middle and low-income households.



Target Market / Clients

The project will benefit around 16,000 (2022) registered fisherfolk in the province. Most of the fisherfolks have skills and knowledge on fish cages and fish pen operations in which they underwent training from SEAFDEC, BFAR Personnel, Provincial Office for Agricultural Services, and Municipal Agriculture Office.

Target Location

The areas open for investment to put up fish cages and fish pens are Municipality of Jordan: Brgy. Lawi and Brgy. Hoskyn (20 has.

Benefits

A gross income of P99,750.00 per module is expected after two harvests, from a capitalization of P237,452.00 per module.

Investment Requirements

<i>For Fish Pen</i>	
<i>Bangus Juveniles*</i>	<i>P 11,669.00</i>
<i>Materials**</i>	<i>P 115,150.00</i>
<i>Labor***</i>	<i>P 25,233.00</i>
<i>Commercial Feeds</i>	<i>P 74,970.00</i>
<i>Operating Expenses</i>	<i>P 42,000.00</i>
<i>Estimated Project Cost per module****</i>	<i>P 269,022.00</i>
<i>For HDPE Fish Cages</i>	
<i>Bangus Juveniles</i>	<i>P 11,669.00</i>
<i>Materials*****</i>	<i>P 125,150.00</i>
<i>Labor</i>	<i>P 25,233.00</i>
<i>Commercial Feeds</i>	<i>P 74,970.00</i>
<i>Operating Expenses</i>	<i>P 42,000.00</i>
<i>Estimated Project Cost per module****</i>	<i>P 279,022.00</i>

Assumptions:

*The bangus juveniles purchased per module is 833 per cycle. The total bangus juveniles in 2 cycles is 1,666.67. The stocking density is assumed at 30 bangus juveniles per square meter.

**Materials such as PE Nets, Ropes, twines, B nets, plastic drums, lumber, bamboo poles, C.W nails

***Labor expenses good for 2 cycles

****The modular pond system (module) is a semblance of stock manipulation and recorded an annual and consistent production of no less than 2 tons per hectare. The project will utilize 3x3x3 pen measurement.

*****Additional material - HDPE set estimated at P 15,000.00 per set

Profitability

<i>Transport Mortality Rate</i>	16%
<i>Average body weight of 1 bangus</i>	500 grams
<i>Production of Bangus in 2 cycles</i>	1,400
<i>Average Farm Gate Price</i>	P 180.00
<i>Estimated Gross Profit</i>	P 126,000.00
Rate of Investment	
<i>Fish Pen</i>	(53.16%)
<i>HDPE Fish Cages</i>	(54.84%)
Payback Period	
<i>Fish Pen</i>	0.47 years
<i>HDPE Fish Cages</i>	0.45 years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements and Direct Private Investment thru:

— Funding support for operations and management

Goat Multiplier Farm

Project Description

In the Philippines, native breeds of goats are raised for their meat. Goat inventory was estimated at 3.96 million heads, with 99.3% of the production coming from smallholder farms. Western Visayas is among the top three producers of live weight goats in terms of number of heads (482.18 thousand heads), and the top producer in terms of volume of production with 1.85 thousand metric tons (MT), liveweight or 12.4% share in the total goat production.

The Province of Guimaras is the top four goat producer in the region, contributing 8% of the total regional production from 2012-2015. In 2022, the number of heads produced in the province rose to 14,377 heads. Live goats are usually sold by the farmers in and outside Western Visayas through goat traders.

Over the years, a decline was seen in the production of goats as farmers/raisers mostly kept goats on their backyard farms.. This can be attributed to lack of goat breeder/multiplier farms, undeveloped forage area and limited number of upgraded stocks.

These issues can be addressed through capital investment and access to credit programs, which will be used to establish multiplier farms and purchase of parent stocks.



Target Market

The target market is the Guimaras Employees Multi-Purpose Cooperative. A CDA registered group that supports farmers and fishers in terms of providing start-up capital. Further, live goats can be sold through institutional buyers in and outside Western Visayas.

Target Location

The target location for the establishment of a goat multiplier farm is in Barangay Igawayan, Municipality of San Lorenzo strategically facing the Negros Occidental, making it easier in transporting livestock to-and-from the nearby island, which play an important

role in their local economy. Over 50% of the total land area of San Lorenzo is used in growing agricultural products, which makes it viable for goat breeding.

Benefits

Investment Requirements	
<i>Land, Building and Equipments*</i>	<i>P 10,000,000.00</i>
<i>Parent Stocks**</i>	<i>P 955,000.00</i>
<i>Operating Cost</i>	<i>P 3,000,000.00</i>
<i>Estimated Project Cost</i>	<i>P 13,955,000.00</i>
<i>Assumptions:</i>	
<i>*Production system is full confinement with land area of 1 hectare: 25 does for forage consumption</i>	
<i>**Parent stocks to be purchase are 50 Does and 2 Bucks with a ratio of 1:25</i>	
Profitability	
<i>Conception Rate*</i>	<i>90%</i>
<i>Kidding Per Cycle in Year 1**</i>	<i>2</i>
<i>Estimated production in Year 1</i>	<i>45</i>
<i>Average market weight of live goats</i>	<i>90 kgs</i>
<i>Average Market Price of live goats</i>	<i>P 260.00</i>
<i>Estimated Gross Profit</i>	<i>P 2,106,000.00</i>
<i>Assumptions:</i>	
<i>*Conception rate is defined as the percentage of goats pregnant during the mating period</i>	
Rate of Investment	(84.90%)
Payback Period	6.63 years

Preferred Investment Modality

Public-private partnerships through Joint Venture Agreements and Direct Private Investment thru:

- Funding support for the construction of facilities
- Provision of machineries
- Operations and Management