



OUTLINE OF PRESENTATION



- 1. Status of the Philippine Coconut Industry
- 2. Value Chain Development Opportunities of Coconut
- 3. Market Performance of Philippine Coconut Products
- 4. Major Growth Drivers
- 5. Programs Supporting the Development of the Coconut Industry
- 6. Comparative Advantage of the Philippine Coconut Industry
- 7. Challenges and Bottlenecks of the Industry
- 8. Strategies to Enhance Industry Competitiveness
- 9. Investment Areas & Business Potentials



Philippine Coconut Industry: Brief Profile

Coconut industry is one of the pillars of the national economy. Source of the country's biggest agricultural exports (CNO, DCN, Copra Meal, Activated Carbon, Oleochemicals). **Philippines** – biggest exporter and preferred supplier of coconut products. In early 1920s, the country was already providing **one-third (1/3)** of the world's demand for copra, with the USA as the biggest market. With the expansion of the global trading, from 1 million hectares in the 1950s, the country has now 3.65 M hectares of coconut farms, accounting 26% of the country's total agricultural area. **14.4 Billion nuts -** Average annual nut production (2016-2020) **40 Million –** Average daily nut production

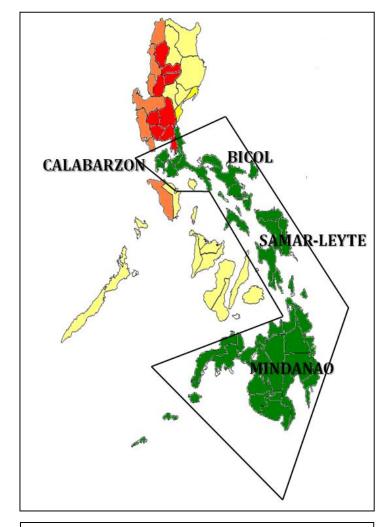
To date, PH is exporting **53 kinds** of coconut products.



Coconut Production Areas of the Philippines

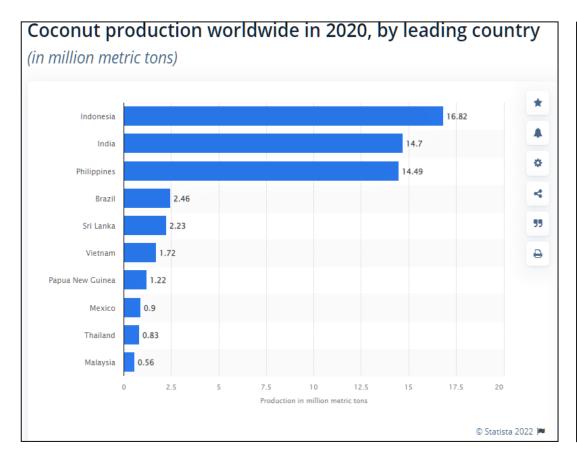
- Mindanao island supplies 61% of the country's total coconut production
- Among the top 5 coconut-producing regions, 4 are in Mindanao
- In terms of production area, Region 4-A is the biggest, followed by Region 9.
- In terms of production volume, Region 11 is the highest producer, followed by Region 10.

REGIONS	AREA (HA)	PROD'N (MT)
CAR	320.00	1,024.14
ILOCOS REGION	12,541.95	44,012.42
CAGAYAN VALLEY	15,394.00	78,716.52
CENTRAL LUZON	28,129.10	111,839.55
CALABARZON	(1) 483,398.00	(4) 1,493,066.64
MIMAROPA	223,764.00	759,368.93
BICOL REGION	(3) 453,995.10	1,150,857.40
WESTERN VISAYAS	127,730.00	521,586.92
CENTRAL VISAYAS	127,775.00	388,543.41
EASTERN VISAYAS	(6) 330,140.00	1,099,650.00
ZAMBOANGA		
PENINSULA	(2) 454,429.00	(3) 1,746,036.45
NORTHERN		
MINDANAO	303,981.61	(2) 1,858,779.80
DAVAO REGION	(4) 355,905.00	(1) 1,962,696.73
SOCCSKSARGEN	207,136.00	1,162,645.64
CARAGA	196,741.00	764,124.00
ARMM	(5) 329,909.00	(5) 1,347,973.40
TOTAL	3,651,288.76	14,490,922.68



69 out of **80 provinces** of the country are coconut-producing areas

GLOBAL POSITION OF THE PHILIPPINE COCONUT INDUSTRY



Rank	Countries	Production of Cononut in 2021
		(Tons)
1	Indonesia	17,159,937
2	Philippines	14,717,293
3	India	14,301,000
4	Sri Lanka	2,496,000
5	Brazil	2,457,860
6	Viet Nam	1,866,181
7	Papua New Guinea	1,813,553
8	Myanmar	1,238,307
9	Mexico	1,120,093
10	Thailand	797,700
Source:	FAOSTAT, 2021	

- In 2020, the Philippines became the 3rd leading coconut producer, next to India, from being the 2nd next to Indonesia in the past decades. This was due to the series of strong typhoons in the 2nd semester of 2020. However, PH remains as the biggest exporter of coconut products.
- In 2021, PH regained its position as the 2nd biggest coconut-producing country both in terms of land area utilized to coconut and volume of production.

Top 10 Philippine Exports (CY 2021 & 2022)

Table B. Year-on-Year Growth Rate of Value of Philippine Exports for Top Ten Major Commodity Groups: December 2021^p

Major Commodity Group	Annual Growth Rate (%)
Gainers	
1) Coconut Oil 1/	135.2
2) Other Manufactured Goods	53.5
3) Chemicals	43.0 🔺
4) Machinery and Transport Equipment	19.2 🔺
5) Electronic Eqpt. and Parts	16.5 🔺
6) Other Mineral Products	4.9 🔺
7) Electronic Products	1.8 🔺
Losers	
8) Ignition Wiring Set and Other Wiring Sets Used in Vehicles, Aircrafts and Ships ^{2/}	-24.1 ▼
9) Metal Components 3/	-5.3 ▼
10) Bananas (Fresh)	-4.8 ▼

^{1/ -} includes crude and refined

Table B. Year-on-Year Growth Rate of Value of Philippine Exports for Top Ten Major Commodity Groups: December 2022^p

	Major Commodity Group	Annual Growth Rate (%)		
	Gainers			
1)	Cathodes and Sections Of Cathodes, Of Refined Copper	69.1	<u> </u>	
2)	Ignition Wiring Set and Other Wiring Sets Used in Vehicles, Aircrafts and Ships 1/	24.0	•	
3)	Other Mineral Products	13.2	•	
4)	Machinery and Transport Equipment	12.4	A	
5)	Coconut Oil 2/	-39.5	•	
6)	Chemicals	-24.7	•	
7)	Electronic Products	-13.9	•	
8)	Other Manufactured Goods	-9.8	•	
9)	Metal Components 3/	-3.0	•	
10)	Electronic Equipment and Parts	-2.7	•	

^{1/ -} consists only of electrical wiring harness for motor vehicles

- In CY 2021, two agricultural products were in the Top 10 exports of the country, with coconut oil as the "highest jumper" among the gainers.
- In CY 2022, coconut oil was the only agricultural product that made to the Top 10 Philippine exports, but with 39.5% negative growth rate. This was a result of the supply glut of vegetable oils in the global market starting in the 2nd quarter brought about by the lifting of the temporary ban on export of Indonesia and the low demand for rapeseed and other vegetable oils in the EU because of high prices in the early part of the year.
- Despite the ups and downs in the 2022 market trend, total coconut exports still hit the 3 billion US dollar mark in terms of export value = USD 3.0 B

^{2/ -} consists only of electrical wiring harness for motor vehicles

^{3/ -} excludes brakes and servo-brakes

p - preliminary

Source: Philippine Statistics Authority

^{2/ -} includes crude and refined

^{3/ -} excludes brakes and servo-brakes

p – preliminary

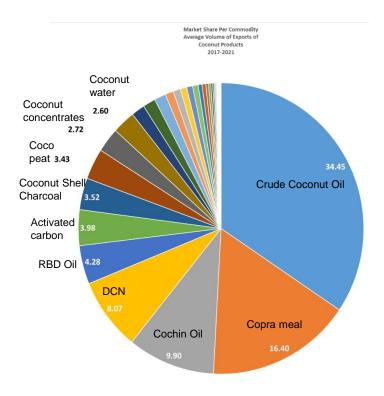
Source: Philippine Statistics Authority

MARKET SHARES BASED ON AVERAGE EXPORT VOLUME (2017-2021)



In the last 5 years, the Philippines has been exporting **53** coconut products

Crude Coconut Oil 34.45 1	Commodity	2017-2021	Rank
Copra Meal/Cake	· ·	Volume % Share	
Desiccated Coconut			
Desiccated Coconut RBD	•		
RBD		9.90	
Activated Carbon Coconut Shell Charcoal 3.52 Coco Peat 3.43 8 Coconut Concentrates 2.72 9 Coconut Water Coconut Shell Charcoal (algomerated) 1.52757 1.1 Coconut Melthylester 1.42492 1.2 Coconut Melthylester 1.42492 1.2 Coconut Melthylester 1.42492 1.31362 1.3 Other 0.94260 1.4 Other Rav Coir (Fiber) 0.94260 1.4 Other Rav Coir (Fiber) 0.83404 1.5 Coconut Milk Liquid 0.72522 1.6 Coconut Fatty Acid Distillates 0.67742 1.7 Hydrogenated Coconut Oil 0.63093 1.8 Coconut Acid Oil 0.43624 1.9 Glycerine Refined 0.41739 0.00677 2.1 Crude Glycerine 0.26411 2.2 Coconut Flour Nata de Coco (prepared/preserved) 0.16998 1.8 Coconut Milk Powder 0.16998 1.8 Coconut Milk Powder 0.16998 1.7 Toilet/BathSoap 0.06524 1.8 Toilet/BathSoap 0.06524 Toilet/Ba	Desiccated Coconut	8.07	4
Coconut Shell Charcoal 3.52 7	RBD	4.28	5
Coconut Concentrates	Activated Carbon	3.98	6
Coconut Concentrates	Coconut Shell Charcoal	3.52	7
Coconut Water	Coco Peat	3.43	8
Coconut Shell Charcoal (Aglomerated)	Coconut Concentrates	2.72	9
Coconut Shell Charcoal (Aglomerated)	Coconut Water	2.60	10
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	Grand Total	100.00	



TOP 10 COCONUT EXPORTS

2021 Top 10 Exported Products in Terms of Average Volume

	0 11:	2021 Average			
	Commodity	Volume	Value		
1	Crude Coconut Oil	47,321.11	67,971,064.33		
2	Copra Meal/Cake	25,513.68	5,518,220.22		
3	Desiccated Coconut	12,954.89	30,452,010.22		
4	RBD	9,801.95	15,688,488.44		
5	Coconut Concentrates	9,481.53	9,181,623.11		
6	Coco Peat	9,321.36	461,432.78		
7	Cochin Oil	8,267.57	13,018,971.89		
8	Activated Carbon	6,115.77	11,818,745.00		
9	Coconut Shell Charcoal (Aglomera	5,779.16	3,913,917.33		
1	Coconut Shell Charcoal	3,373.32	2,070,746.00		

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7	Coconut Concentrates	9,481.53	9,181,623.11	
8	Copra Meal/Cake	25,513.68	5,518,220.22	
9	Coconut Methylester	2,864.92	4,434,406.67	
1	Coconut Shell Charcoal (Aglomera	5,779.16	3,913,917.33	

- CRUDE COCONUT OIL remains as the country's number 1 agricultural export, consisting 65 % of the total oil exports. This situation remains the same in the past decades until to date except in 2018 where it was surpassed by fresh banana.
- Strong dependence on <u>crude coconut oil export</u> (as raw material) renders the local coconut industry vulnerable to global price shocks which has a domino effect to domestic copra price and results to <u>low GVA</u> due to <u>early transfer of product ownership</u>.
- With the increase in demand in biofuels, the country may focus in processing CNO into CME which also produces glycerol as co-product to minimize importation of glycerin.
- Or process CNO into MCT & other high value oleochemicals.
- In terms of volume, coco peat & coconut shell charcoal were among the Top 10, but in terms of value, Coconut Methyl Ester & VCO came in.

Major Growth Drivers & Market Opportunities









Business-to-Consumer (B2C)/ E-commerce/ Social Media Marketing

- 1. Ballooning population & the corresponding demand for food commodities
- 2. Changing dietary habits & increasing health consciousness among consumers –"Return of the Naturals"
- 3. Improved retailing network which was triggered by the pandemic
- 4. Expanding non-edible applications (biofuels, lubricants, skin care, etc.)

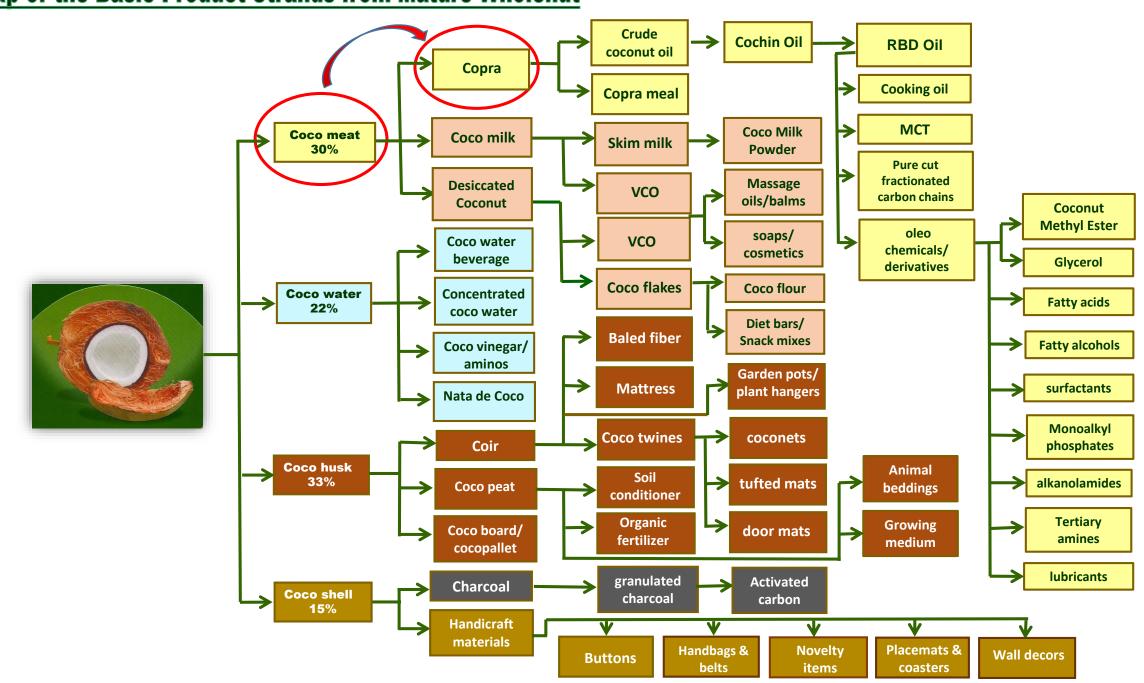




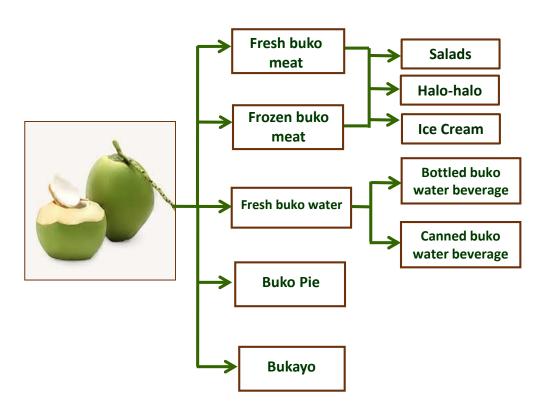
Value-addition & Agribusiness Opportunities in Coconut



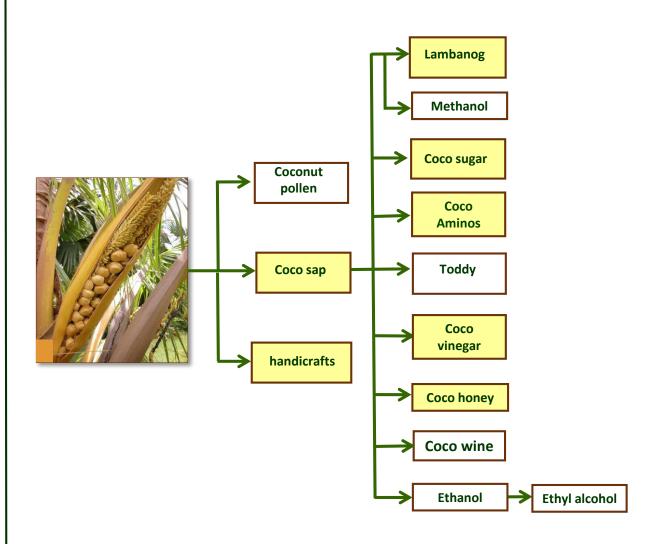
Map of the Basic Product Strands from Mature Wholenut



Basic Product Strands of Fresh Young Coconut



Map of the Basic Product Strands from Coconut Inflorescence



COMPARATIVE ADVANTAGES OF COCONUT

- 1. Supply base 3.65 M hectares of coconut area, covering 69 out of the 80 provinces of the country
- 2. Strong global demand internationally-traded since the early 10th century, plus the new health trend focusing on natural products or the so-called "Return of the Naturals"
- 3. **Versatility** used as raw materials for food and non-food products (coconut oil to CME for biofuels, oleochemicals for surfactants, jet lubricants, soaps, cosmetics & skin care products; coir products for slope protection, road and streambank stabilization, soil conditioner and hydroponics growing medium)
- 4. Availability of technologies from production and processing including machineries & equipment
- **5. Established big brothers and marketing network –** (PCOPA, CORA, APCD, POMA, PCAMA, VCOP, PhilCOIR, NCFRS-registered Coops/CFAs)
- **6. Plantation establishment Plant only once** and starting in the 3rd year they can harvest coconut up to 60 to 100 years
- **7. Health and Wellness Benefits –** anti-viral, anti-fungal, anti-bacterial properties plus low glycemic index

COCONUT OIL REDISCOVERED



POSITIONING OF COCONUT PRODUCTS BASED ON HEALTH AND WELLNESS BENEFITS

- The proven efficacy of VCO against COVID infection from developing into severe case
- Use of VCO as massage oil & for topical applications to prevent infection of wounds, insect bites, skin allergies and burns.
- Coconut water and buko juice are another important coconut products that can help prevent/ alleviate infection like UTI and kidney problem.
- Cocosugar low glycemic index (only 35%), good for diabetics, can substitute cane sugar for households
- Coco flour low glycemic index and gluten-free, can substitute up to 40% to wheat flour for baking
- Nata de coco apart from being used as dessert, can also be processed into coco patch for wounds & burns
- With the above, apart from the common households, hospitals, government offices, restaurants & hotels are among the potential big markets of coconut products.

Electrolyte Level of Formulated COCO WATER Drink, Commercial Sports Drink and ORS

ELECTROLYTES	Formulated Coco water drink (mg/100 ml)	Commercial Sports Drink (mg/100 ml)	Oral rehydration solution (WHO, 2001) (mg/100 ml)			
Potassium	196	11.7	78.20			
Sodium	14	41	172.42			
Chloride	76	39	230.44			
Magnesium	6	7	None			

Major Nutrients in COCO SAP SUGAR Compared with BROWN SUGAR

Nutrient (ppm, mg/L)	Coco Sap Sugar	Brown Cane Sugar
Nitrogen (N)	2,020	100
Phosphorus (P)	790	30
Potassium (K)	10,300	650
Magnesium (Mg)	290	70
Chloride (CI)	4700	180
Zinc (Zn)	21.20	2
Iron (Fe)	21.90	12.60









DOMESTIC POTENTIALS OF COCONUT PRODUCTS

- The >100 M Philippine population is a big domestic market of coconut products
- Cooking oil, vinegar, sugar, sauces/aminos; cocomilk are among the kitchen essentials, all of these can be produced from coconut at the kitchen level.
- Producing these products for household use can greatly help in alleviating the negative impact of rising food prices as triggered by the following: 1) COVID Pandemic; 2) Climate Change; 3) Conflicts (e.g. Russia-Ukraine war).
- Expanding the domestic market will shield the industry as well as the local consumers from the impact of the global price shocks.



ISSUES/BOTTLENECKS OF THE INDUSTRY



Low farm productivity – due to the following:
> Senility of coconut trees
> Pest and disease infestations
Low adoption of technology at the farmers level
Weak farmers organizations – low capacity to go into
collective business
Fragmented efforts of value chain actors both government &
private industry players
Limited infrastructure support (FMRs & Irrigation systems)
Non-compliance to standards (product & application
protocol) & other market-required certifications
Weak market information system
Aging coconut farmers

Coconut Industry Development Policy



Intensify Research, Development & Extension Programs



Strengthen convergence & synergy among coconut value chain players



Intensify planting and replanting of coconut trees



Empower farmers with economic empowerment system



Promote Value Addition, Crop Diversification and Animal Integration



Strengthen marketing & product promotion



Investment Priorities in Coconut



- 1. Increase material balance utilization convert the coconut water, husks and shell into value-added products (current commercial utilization for water & husk is only at 8.5%)
- **2. Improvement of copra production –** to increase CNO price & minimize MOH contamination
- **3. Value addition of the crude coconut oil** process into high value products like CME, MCT and other fractionated products
- **4. Expand domestic market -** to shield the industry from vulnerability to global price shocks







Coconut Husk-based Investments



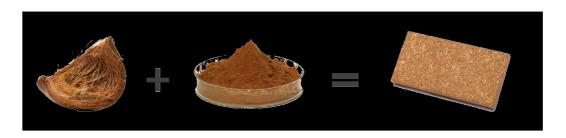


COCO BOARD MANUFACTURING



WHAT THE PROJECT IS ALL ABOUT

- Production/Manufacturing of bio-based panels or coco boards from coconut husks for furniture and construction applications
- Coco Board 100% bio-based, tested to be termite resistant, with zero formaldehyde emission, resistant to moisture, and cost competitive.



Coconut Husk + Bio – based adhesive = Coco Board













- Coco board is cheaper than wood. The cost of coco husk to produce 1 cubic meter of coco board is PhP 672 as compared to the cost to produce 1 cubic meter of wood board which ranges from PhP 3,000 to 5,000 (dry equivalent wood materials).
- > The coco board will be produced based on the circular economy principle or **zero** waste process.
- ➤ With the country's average yield of 45 nuts per tree per year, farmers can have a **20%** increase in income from the husk alone in addition to whole nut trading or copra production.
- The country's annual requirement for boards/panels for furniture, construction applications and other uses is recorded at <u>800,000</u> cubic meters while the country's current wood-based production of panels is only at <u>150,000</u> cubic meters/year. Thus, there is a big supply gap to be filled up in order to minimize **importation**.



INVESTMENT REQUIREMENT



- Location Quezon Province (for the 1st manufacturing plant)
- Main Processing Plant = \$ 6.5 M (P325 M) Total investment and start up cost using German machineries & equipment
- Production capacity 30,000 cubic meters/year
- Payback Period 2.5 years
- **ROI -** 60%
- Land area requirement for the processing plant 3 hectares
 - > NaturLoop will invest directly in the main production line
 - > \$ 2M grant from RAPID Growth Project
 - > \$0.5M loan from the Swiss Confederation Secretariat for Economic Affairs
- Expansion General Santos City, Davao del Norte, Bislig City



Husk Consolidation/ Chipping Centers



- Support facilities for the raw material supply of the Coco Board Manufacturing
- > Establishment of at least 5 Husk Consolidation/Chipping Centers
- P17 Million Pesos per Consolidation Center

Warehouse= PhP 3 M;

Machinery = Php 5M -Chipping machine, conveyor system, mechanical dryers

Hauling trucks – Php 8M

Working Capital = Php 1M/consolidation center) for husk buying to supply 10,000 to 15,000 tons/year in the first year

❖ Farmers & community entrepreneurs can participate thru coconut husk consolidation & chipping and deliver it to the Central Consolidation Center



COCO PALLET MANUFACTURING



What the project is all about:

- Production/Manufacturing of bio-based CocoPallet from coconut husks as sustainable replacement for wooden pallets
- Coco Pallets 100% bio-based made from coconut husk and natural glue, fully circular value chain, 25% cheaper, export-compliant, customizable, with nestable design, and cost competitive.





Coconut Husk (fiber + peat) + Natural glue = Coco Pallet



INVESTMENT REQUIREMENT



Main Processing Plant

- Sourcing requirement 20 tons of coconuts husks per day for the initial two (2) pressing machines, expansion to 40 tons of coconut husks daily requirement for four (4) pressing machines, and eventual daily target of 100 tons of coconut husks daily
- ▶ Location 1st facility in Misamis Oriental Complex
- Plan to establish three (3) factories in the country (1- Luzon, 1- Visayas,
 1- Mindanao);



Husk Consolidation/ Chipping Centers



- > Support facilities for the raw material supply of the Coco Board Manufacturing
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COIR PROCESSING / COCONET BIO-ENGINEERING



Processing of husk to produce coir (coco fiber) and coco peat.

Main uses of Coir:

- Making twines/ropes
- Geonets
- Biologs
- Bags
- Packaging materials
- Door mats/ Rugs
- Mattings
- Wall carpets
- Plant hangers
- Furnishing fabrics
- Insulation material

Main uses of coco peat:

- Home gardening and for landscaping
- Mushroom cultivation
- Potting mixes in plant nurseries
- Hydroponics growing media
- Growing medium for seedling nurseries
- Horticulture and floriculture applications
- Amending clay soils
- Animal bedding



COIR PROCESSING / COCONET BIO-ENGINEERING



□ Coconet Bio-engineering Solution – processing coir into twines, coconets, biologs and use it for Coconet Bio-engineering Solution for erosion control, slope protection, road and stream bank stabilization



Bio-engineering application in NIA Irrigation
System



Bio-engineering application for slope protection in DPWH road project

Use of the Coconet Bio-engineering Technology is mandated under MC No. 25 s. 2002 & RA 11524



Village Level Integrated Coconut Processing



What the Project is all about:

- > Production of VCO, coconut water beverage & coconut flour
- Capacity 800 to 1,200 nuts/day
- Daily output:
 - -VCO = 80 liters (P700/ltr)
 - Coco water beverage = 1,200 cups @250 ml (P20/cup)
 - Coco flour = 84 kgs. (P50/kg)



INVESTMENT REQUIREMENT



Total Investment Requirement = P5.0 M

1. Building = P2.5 M

2. Machines & equipment:

- Wet process expeller = P1.0 M
- Cabinet dryer = P300 K
- Hammer mill = 150K
- Chiller = 100K
- Stainless Tables = 100K
- Stainless stockpots & other stainless utensils = 50K
- Grating machines = 20K 2units@ 10K each
- Pressing machine = 40K
- Cap Sealing Machine = 15K
- Sachet sealing machine = 5K
- **3. Start up capital** = 720K (for raw materials & other consumable supplies)

Payback Period = 8 months to 1 year



Village-level Integrated Coconut Processing



PRIORITY REGIONS

LUZON: VISAYAS

- 1. MIMAROPA
- 2. Bicol Region

- 1. Eastern Visayas
- 2. Central Visayas
- 3. Western Visayas

MINDANAO

- 1. Zamboanga Peninsula
- 2. SOCSKSARGEN
- 3. Caraga Region
- 4. BARMM









Buko Pinas is a huge opportunity for micro enterprises. With only a P 150,000 starting capital, you can have your own Buko Pinas Cart 100 pieces of young coconuts per day.

With the Buko Pinas Cart's bold colors, modern equipment, and hygienic handling of coconuts, you are sure to attract local buyers. Place your cart at prime locations, such as schools, churches, public markets, and offices. In less than no time, you will have your regular "suki" buying your buko on a daily basis.

Aside from its marketability, you will love Buko Pinas' functionality. It is lightweight, easy to clean and maintain, and durable versus the traditional coconut *kariton*.

What are you waiting for? Innovate with coconuts and invest in Buko Pinas!

Disclaimer: This portion was made for presentation purposes only. Not an actual investment package. But assumptions are more or less based on current pricing.





Bus	Business Model Canvass:Buko Pinas							
Key	y Partners	Key Activities	Value Proposit	ions	Customer Relationships	С	ustomer Segments	
	Coconut Farmers	Preaparing Buko Juice	Fresh bu	ko juice	Personal relationship with customers		Students	
	Cooperative	Selling & Marketing						Faculty
	School/University Administration	Purchasing of Buko & Supplies	Cold tasty n for on-the-s Safe, clean	go people	Health-consious individuals			
	PCA for Cart & Training		Hygienic and	modern cart				
		Key Resources	-		Channels			
		Cart & equipment			Social Media (FB Page & Instagram)			
		Buko			(151 age a motagram)			
		Sales person			Cart Sales			
Cos	st Structure			Revenue Strea	ams			
		Product Cost		Ві	ıko Juice Sales			
	Cart & Equipmer	Salary & Commu Expense						

- DepEd DO 13 S. 2017 Policy and Guidelines on Healthy Food and Beverage Choices in Schools and in DepEd Offices
 - > Make available healthier food and beverage choices among the learners and DepEd personnel and their stakeholders;
 - ➤ Introduce a system of categorizing locally available foods and drinks in accordance with geographical, cultural, and religious orientations.







Assumptions

- · The business is operated as a sole proprietorship
- · The lifespan of the cart is five years
- Sales volume is estimated at 180 cups per day
- The product is sold to high-density schools or universities within a 2km radius of the buko source
- The cart will operate seven days a week, 30 days a month, or 360 working days
- · The cart will need 100 nuts per day
- A 10% loss is assumed during operation



Assumptions

++

Conversion of Buko (pieces) to juice (cups)

Item	Qty
No of Buko (pc) per day	100
Ave Vol of juice/nut (L)	0.70
Total Volume	70.00
Less: 10% loss (L)	7.00
Net Volume of Juice (L) per day	63
Vol of juice per cup (L)	0.35
Total no of buko juice cups per day	180.00







Opening a Buko Pinas cart will require a capital investment from yourself and potential shareholders. We are projecting this startup cost structure for a single cart:

CAPEX	Unit	Qty	Cost	Amount	Amount
Fiber Galss Cart	рс	1	75,000	75,000	75,000
Equipment				-	61,000
Stainless Coconut Piercer	рс	1	5,000	5,000	
Stainless Coconut Cutter	рс	1	5,000	5,000	
Stainless Coconut Water Filter	рс	2	2,000	4,000	
Fiber Class Coconut Water Dispenser with Stainless Faucet	рс	1	28,000	28,000	
Stainless Coconut meat scrapper	рс	2	500	1,000	
Ice box	рс	1	3,000	3,000	
Smart Phone	рс	1	15,000	15,000	
Pre-Operation Expenses			20	- 50	10,000
Business Permits & Licenses		1	10,000	10,000	
Sub-total: CAPEX				P	146,000
Working Capital					4,000.00
Total Investment Required					150,000.00



PINOY COCO PANDESAL & Other Coco-based Food Products













- Contact PCA-FPDD or DOST-FNRI for the recipe
- Contact the VCOP for supply of coconut flour



OTHER MAJOR INVESTMENT AREAS



- 1. <u>Integrated White Copra Centrals (IWCC)</u> for the production of white copra with 6% moisture content, coconut water concentrate, cocoshell, and charcoal. The Copra Centrals will buy dehusked nuts from farmers, freeing them from the drudgery of making copra.
- **3.** <u>Integrated Coconut Processing Centers (Wet Process)</u> for the production of VCO, cocowater (CW), coconut water concentrate (CWC), coconut flour and coconut skimmed milk, among others.
- **4.** <u>Coir Processing from Mature and Young Nuts</u> for the production of twines, geonets, cocopeat, cocologs, growing medium, animal beddings, handicrafts and fiberboard.
- **5.** Coco Sap-based Processing Facilities Coco sap is made into "bahalina", coco sugar, coco syrup, aminos, lambanog, coco alcohol (ethanol), and coco toddy vinegar.
- 6. Coco shell processing into charcoal (for delivery to activated carbon companies), briquettes (for Mang Inasal of Jollibee Corp), shisha (for the Middle East market), and activated carbon



OTHER BUSINESS OPPORTUNITIES IN THE COCONUT INDUSTRY

- **1. Professional Service Crew** for coconut harvesting, dehusking, Coconet Bio-engineering Installation, etc.
- 2. Business Coaching and Mentoring nurturing & coaching micro and small enterprises on how to manage and sustain their business, e.g. supply management, record keeping, costing and pricing, product labelling, market linkaging, and contract negotiation & management
- **3. Machineries and equipment design and fabrication** design or fabricate available machines & processing equipment designed by government research centers like DOST-MRIDC, DA-PhilMech & PCA-ZRC
- 4. Farm Learning School accreditation with ATI or TESDA

PROGRAMS/PROJECTS SUPPORTING THE COCONUT INDUSTRY

- PCA- Accelerated Planting & Replanting Program,
 Fertilization Program, Intercropping & Animal Dispersal Program
 Coco Hub Project & KAANIB Enterprise Development Project
- DA PRDP I-REAP (conducted Coconut Value Chain Analysis & Provincial Commodity Investment Plan)
- **DTI** Shared Service Facility (SSF) Program, RAPID Project
- DAR ARCCESS Program, CONVERGE & other foreign-assisted projects
- **DOST** SET-UP Program
- DOLE Toolbox Productivity Program, Social Amelioration and Welfare Program (SAWP) for workers in Bio-fuels Sector
- DSWD Sustainable Livelihood Program
- LGU livelihood programs
- NGO Projects Villar Foundation, FSSI, Peace & Equity Foundation (PEF), International NGOs
- International Organizations GIZ, ILO, UNCTAD, EU-ARISE, Spanish AECID, JAIF, etc.
- CFIDP Implementation of the Coco Levy Trust Fund Act (R.A. 11524)

Note: For participants with coconut farms in the Philippines, please inform your family or your tenant to register in the National Coconut Farmers Registry System (NCFRS) at the nearest PCA Office (municipal, provincial or regional office).



