



Vol. 1: Agri-fresh Products

ILOCOS REGION

Agribusiness Investment Opportunities

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BLACK AND RED RICE PRODUCTION (Milled)



Harvest Season: September-October

Maturity Days: 120 days

Local Name: Palay

Scientific Name: Oryza sativa

Market (Milled Rice): Local

Benefits:

- ◆ Lowers high cholesterol
- ◆ Helps prevent heart disease
- ◆ Lowers the blood glucose
- ◆ Helps the risk of obesity
- ◆ Enriched with antioxidants that can help fight damaging free radicals in our body

Nutritional Value:

- ◆ Fiber
- ◆ Iron
- ◆ Carbohydrates
- ◆ Potassium
- ◆ Fats

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Alaminos City	Aringay	Sto. Domingo	Burgos
Mangatarem	San Fernando City	Cervantes	
	San Gabriel		

Cost and Return Analysis for One Hectare Black/Red Rice Production (Milled)

Production/Milled Rice (kgs)	= 2,100 kgs
Price per kilogram	= 55.00
Gross Sales	= 115,500.00
Production Cost	= 62,955.00
Net Income	= 52,545.00
Break-Even Price	= 29.98 per kilogram
Break-Even Volume	= 1,144.64 kilogram
Benefit-Cost Ratio	= .83

**Production Cost of One Hectare
Black/Red Rice Production (Milled)**

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
Labor Cost				42,890.00
Plowing	per hour	3	650.00	1,950.00
Harrowing	MAD	1	480.00	480.00
Seedbed preparation & Seed sowing	MD	2	230.00	460.00
Repair of Dikes	MD	2	230.00	460.00
Pulling of seeds	MD	12	230.00	2,760.00
Transplanting	MD	12	230.00	2,760.00
Fertilizer Application	MD	4	230.00	920.00
Spraying	MD	1	230.00	230.00
Harvesting & Threshing	bag	10	2,875.00	28,750.00
Drying and handling	MD	4	230.00	920.00
Other Activities:				-
Milling	can	80	40.00	3,200.00
Material Cost				16,950.00
Seeds	kgs	30	60.00	1,800.00
Fertilizer				13,900.00
Vermi Compost	bag	20	250.00	5,000.00
Complete	bag	3	1,150.00	3,450.00
Urea	bag	5	1,000.00	5,000.00
Pesticide	bot	1	450.00	450.00
Sacks	pcs	80	10.00	800.00
Fixed Cost				2,550.00
Irrigation Fee				2,550.00
Depreciation Cost				123.00
Bolo	unit	1	250.00	15.00
Knapsack	unit	1	1,800.00	108.00
Contingencies				2,992.00
TOTAL COSTS/EXPENSES				62,955.00

GARLIC BULB PRODUCTION

Peak Harvest Season: February-March
Off Season: June-October
Maturity Days: 150 days

Local Name: Bawang
Scientific Name: Allium sativum



Market: Local Consumers, Processors

Benefits:

- ◆ Reduced blood pressure
- ◆ Improves cholesterol level
- ◆ Lowers the risk of heart disease
- ◆ Helps detoxify heavy metals in the body
- ◆ May improve bone health

Nutritional Value:

- ◆ Manganese
- ◆ Vitamin B6
- ◆ Vitamin C
- ◆ Selenium
- ◆ Copper

By Products:

- ◆ Pickled
- ◆ Powder
- ◆ Flakes
- ◆ Chips
- ◆ Oil

Major Producing Municipalities by Province

ILOCOS SUR	ILOCOS NORTE
Sinait Narvacan Magsingal Sto. Domingo	Pasuquin Vintar Paoay Sarrat Burgos

Cost and Return Analysis for One Hectare Garlic Bulb Production

	Cultivated	Zero Tillage
Production (kgs)	= 4,000	= 4,000
Price per kilogram	= 120.00	= 120.00
Gross Sales	= 480,000.00	= 480,000.00
Production Cost	= 153,720.07	= 175,308.66
Net Income	= 326,279.93	= 304,691.34
Break-Even Price	= 38.43	= 43.83
Break-Even Volume	= 1,281.00	= 1,460.91
Benefit-Cost Ratio	= 2.12	= 1.74

**Production Cost of One Hectare
Garlic Bulb Production (Cultivated)**

ACTIVITY	MEAS- UREMENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				42,230.00
Seed Preparation and Treatment	MD	10	245.00	2,450.00
Spraying (herbicide)	MD	2	245.00	490.00
Land Preparation (Plowing)	sqm	10,000	0.45	4,500.00
Planting & Mulching with rice hay	MD	35	245.00	8,575.00
Fertilizer Application	MD	10	245.00	2,450.00
Irrigation Management	MD	32	245.00	7,840.00
Weeding	MD	10	245.00	2,450.00
Spraying (pesticide)	MD	6	245.00	1,470.00
Spraying (GA3)	MD	4	245.00	980.00
Harvesting	MD	15	245.00	3,675.00
Drying/sorting/cleaning	MD	15	245.00	3,675.00
Root trimming/sorting/bundling	MD	15	245.00	3,675.00
MATERIAL COST				102,838.64
Herbicide	liter	8	1,200.00	9,600.00
Seeds (large size)	kgs	400	150.00	60,000.00
Seed Inoculant (VAM)	kgs	6	50.00	300.00
Rice Hay	bundle	4,000	3.75	15,000.00
Fertilizers				12,257.32
Complete (14-14-14)	bag	4	1,044.33	4,177.32
Ammonium Sulfate (21-0-0)	bag	6	475.00	2,850.00
Ammonium Phosphate (16-20-0)	bag	4	960.00	3,840.00
Muriate of Potash	bag	1	1,390.00	1,390.00
Insecticides	liter	4	507.33	2,029.32
Fungicides (250 ml)	bot	1	610.00	610.00
Growth Hormone (GA3)	tablet	2	200.00	400.00
Fuel and Oil				2,342.00
Oil	liter	1	150.00	150.00
Diesel	liter	80	27.40	2,192.00
Bamboo for bundling	pcs	3	100.00	300.00
Depreciation Cost				1,398.00
Contingencies				7,253.43
TOTAL				153,720.07

**Production Cost of One Hectare
Garlic Bulb Production (Zero Tillage)**

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				54,600.00
Land Preparation				2,800.00
Irrigation (before planting)	MD	8	280.00	2,240.00
Spraying (herbicide)	MD	2	280.00	560.00
Seed Preparation and Treatment	MD	10	280.00	2,800.00
Planting & Mulching with rice hay	MD	40	280.00	11,200.00
Fertilizer Application	MD	12	280.00	3,360.00
Irrigation Management	MD	32	280.00	8,960.00
Weeding	MD	15	280.00	4,200.00
Spraying (pesticide)	MD	12	280.00	3,360.00
Spraying (GA3)	MD	4	280.00	1,120.00
Harvesting	MD	25	280.00	7,000.00
Drying	MD	20	280.00	5,600.00
Root trimming/sorting/bundling	MD	15	280.00	4,200.00
MATERIAL COST				111,029.20
Herbicide	liter	8	1,200.00	9,600.00
Seeds (large size)	kgs	400	100.00	40,000.00
Seed Inoculant (VAM)	kgs	6	50.00	300.00
Rice Hay	bundle	4,000	9.75	39,000.00
Fertilizers				11,940.00
Complete (14-14-14)	bag	4	1,100.00	4,400.00
Ammonium Sulfate (21-0-0)	bag	4	550.00	2,200.00
Ammonium Phosphate (16-20-0)	bag	4	960.00	3,840.00
Muriate of Potash	bag	1	1,500.00	1,500.00
Insecticides	liter	8	595.00	4,760.00
Fungicides (250ml)	bot	2	698.00	1,396.00
Growth Hormone (GA3)	tablet	2	200.00	400.00
Fuel and Oil				3,333.20
Oil	liter	1	150.00	150.00
Diesel	liter	92	34.60	3,183.20
Bamboo for bundling	pcs	3	100.00	300.00
Depreciation Cost				1,398.00
Contingencies				8,281.46
TOTAL				175,308.66

Note:

High cost of production is attributed to the procurement of rice hay which served as mulching materials for garlic and even in the production of onion especially in the Province of Ilocos Norte wherein there is no enough supply of rice hay in the major garlic and onion producing areas

ONION PRODUCTION

Peak Harvest Season : February-March
Off Season: December-January
Maturity Days: 120 days

Local Name: Sibuyas
Scientific Name: Allium cepa



Market: Local Market

Benefits:

- ◆ Sources of a strong antioxidant
- ◆ Treatment of poor appetite
- ◆ Provide relief in the treatment of coughs, colds, asthma and bronchitis
- ◆ Highly valued herbs possessing culinary and medicinal value

Nutritional Value:

- ◆ Vitamin B6
- ◆ Vitamin C
- ◆ Vitamin B9
- ◆ Carbohydrates
- ◆ Manganese

By Products:

- ◆ Pickled
- ◆ Powder

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Bayambang Bautista Alcala Umingan San Quintin	Aringay	Sinit San Juan Narvacan Sta. catalina Caoayan	Badoc Vintar Pasuquin Laoag City Bacarra

Cost and Return Analysis for One Hectare Onion Production

Production (kgs)	= 13,500
Price per kilogram	= 50.00
Gross Sales	= 675,000.00
Production Cost	= 114,996.45
Net Income	= 560,003.55
Break-Even Price	= 8.52
Break-Even Volume	= 2,299.93
Benefit-Cost Ratio	= 4.87

Production Cost of One Hectare Onion Production

ACTIVITY	MEASURE- MENT	QUANTITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				52,765.00
Land Preparation				7,440.00
Plowing	sqm	10,000	0.45	4,500.00
Digging and pulvurizing soils and leveling	MD	6	245.00	1,470.00
Sowing	MD	1	245.00	245.00
Watering/Weeding/ Spraying	MD	5	245.00	1,225.00
Transplanting & Mulching with rice hay	MD	35	245.00	8,575.00
Fertilizer Application	MD	10	245.00	2,450.00
Irrigation Management	MD	14	245.00	3,430.00
Weeding	MD	30	245.00	7,350.00
Spraying (pesticide)	MD	12	245.00	2,940.00
Spraying (GA3)	MD	4	245.00	980.00
Harvesting	MD	25	245.00	6,125.00
Drying/root trimming/ hauling	MD	40	245.00	9,800.00
Bundling	MD	15	245.00	3,675.00
MATERIAL COST				55,424.00
Herbicide	box	8	1,200.00	9,600.00
Seeds (400 grams/can)	can	10	1,350.00	13,500.00
Rice Hay	bundle	4,000	3.75	15,000.00
Fertilizers				10,006.00
Complete (14-14-14)	bag	4	1,044.00	4,176.00
Urea (46-0-0)	bag	2	1,050.00	2,100.00
Muriate of Potash (0-0-60)	bag	2	1,390.00	2,780.00
Ammonium Sulfate (21-0-0)	bag	2	475.00	950.00
Insecticides	box	4	507.00	2,028.00
Fungicides (500 grams)	kgs	4	610.00	2,440.00
Growth Hormone (GA3)	tablet	2	200.00	400.00
Fuel and Oil				2,150.00
Oil	liter	1	150.00	150.00
Diesel	liter	80	25.00	2,000.00
Bamboo for bundling	pcs	3	100.00	300.00
Depreciation Cost				1,398.00
Contingencies				5,409.45
TOTAL				114,996.45

OFF-SEASON TOMATO PRODUCTION

Peak Harvest Season: February-March
Off Season: September - October
Days to harvest: 30-50 days after transplanting
Productive Period: 2-3 months



Local Name: Kamatis
Scientific Name: Solanum lycopersicum

Market: NFC Sarrat Ilocos Norte; Local Markets; Jollibee Food Corporations

Benefits:

- ◆ Referred to as a “functional food”
- ◆ Helps lower total cholesterol, LDL and triglycerides
- ◆ Helps combat the formation of free radicals known to cause cancer

Nutritional Value:

- ◆ Vitamin C
- ◆ Lycopene
- ◆ Vitamin B6
- ◆ Vitamin K
- ◆ Copper

By Products:

- ◆ Candy
- ◆ Sauce
- ◆ Paste
- ◆ Vinegar

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
San Carlos City Laoac Villasis Manoag Mangatarem	San Fernando City Naguilian Aringay Sto. Tomas Bauang	Narvacan Cabugao Sto. Domingo Sinait Magsingal	Laoag City Sarrat Batac City Paoay Vintar

Cost and Return Analysis for One Hectare Off-Season Tomato Production

Production (kgs)	= 20,000 kgs
Price per kilogram	= 45.00 (months of September to October)
Gross Sales	= 900,000.00
Production Cost	= 157,112.00
Net Income	= 742,888.00
Break-Even Price	= 7.86 per kilogram
Break-Even Volume	= 3,491.38 kilograms
Benefit-Cost Ratio	= 4.73

Production Cost One Hectare Off-Season Tomato Production

ACTIVITY	MEASURE- MENT	QUANTITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				85,420.00
*Seed Bed Preparation	MD	14	245.00	3,430.00
Land Preparation				21,230.00
Plowing - Double passing	sqm	10,000	0.45	4,500.00
Harrowing-1st passing	sqm	10,000	0.38	3,800.00
Harrowing-2nd passing	sqm	10,000	0.38	3,800.00
Furrowing	MAD	2	400.00	800.00
Bed Preparation and Mulching	MD	34	245.00	8,330.00
Transplanting	MD	25	245.00	6,125.00
Trellising	MD	12	245.00	2,940.00
Fertilizer Application	MD	60	245.00	14,700.00
Irrigation Management	MD	20	245.00	4,900.00
Weeding	MD	3	245.00	735.00
Spraying	MD	8	245.00	1,960.00
Harvesting	MD	120	245.00	29,400.00
MATERIAL COST				62,640.80
Seeds (25grams/can)	can	5	1,200.00	6,000.00
Fertilizers				34,183.50
Organic Commercial	bag	6	300.00	1,800.00
Complete	bag	8	1,058.25	8,466.00
Urea	bag	12	1,037.50	12,450.00
Muriate of Potash	bag	6	1,417.50	8,505.00
Ammonium Sulfate	bag	6	493.75	2,962.50
Insecticides	box	2	529.25	1,058.50
Fungicides (500 grams)	kilograms	1	632.00	632.00
Fuel and Oil				3,766.80
Oil	liter	1	150.00	150.00
Diesel	liter	132	27.40	3,616.80
Trellising materials				5,000.00
Plastic Mulch	roll	10	1,200.00	12,000.00
Depreciation Cost				1,398.00
Contingencies				7,653.00
TOTAL				157,111.80

* includes activity such as digging, pulvuring, sowing, watering, weeding, spraying and pricking

OFF-SEASON EGGPLANT PRODUCTION

Peak Harvest Season: April-May
Off Season: October—December
Productive Period: Semi Perennial to Perennial

Local Name: Talong
Scientific Name: Solanum melongena



Market: Local

Benefits:

- ◆ Crushed leaves are used to sooth inflamed hemorrhoids
- ◆ Boiled leaves and roots are used to wash wounds and sores
- ◆ Juice of leaves are used to threat stomach problems
- ◆ Roots are used for treatment of skin diseases
- ◆ Decrease the risk of obesity
- ◆ Promotes healthy complexion and hair

Nutritional Value:

- ◆ Manganese
- ◆ Copper
- ◆ Total dietary fiber
- ◆ Vitamin B6
- ◆ Vitamin B5

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Villasis Asingan Manaoag San Manuel San Carlos City	San Fernando City Naguilian Caba Aringay Sto. Tomas	Sta. Cruz Salcedo Magsingal Sto. Domingo Narvacan	Laoag City Dingras Pasuquin Sarrat Vintar

Cost and Return Analysis for One Hectare Off-Season Eggplant Production

Production (kgs)	= 16,000
Price per kilogram	= 75.00
Gross Sales	= 1,200,000.00
Production Cost	= 211,418.00
Net Income	= 988,581.99
Break-Even Price	= 13.21 per kilogram
Break-Even Volume	= 2,818.91 kilogram
Benefit-Cost Ratio	= 4.68

Production Cost of One Hectare Off-Season Eggplant Production

ACTIVITY	MEASURE- MENT	QUANTITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				122,415.00
*Seed Bed Preparation	MD	10	245.00	2,450.00
Land Preparation				21,720.00
Plowing - Double passing	sqm	10,000	0.45	4,500.00
Harrowing-1st passing	sqm	10,000	0.38	3,800.00
Harrowing-2nd passing	sqm	10,000	0.38	3,800.00
Furrowing	MAD	2	400.00	800.00
Bed Preparation and Mulching	MD	36	245.00	8,820.00
Transplanting	MD	15	245.00	3,675.00
Fertilizer Application	MD	63	245.00	15,435.00
Irrigation Management	MD	62	245.00	15,190.00
Weeding	MD	30	245.00	7,350.00
Spraying	MD	21	245.00	5,145.00
Pruning	MD	10	245.00	2,450.00
Harvesting	MD	200	245.00	49,000.00
MATERIAL COST				77,370.25
Seeds (50grams/can)	can	4	1,300.00	5,200.00
Fertilizers				49,340.25
Organic Commercial	bag	50	300.00	15,000.00
Complete	bag	7	1,058.25	7,407.75
Urea	bag	14	1,012.50	14,175.00
Muriate of Potash	bag	5	1,417.50	7,087.50
Calcium Nitrate	bag	4	1,417.50	5,670.00
Insecticides	box	3	468.00	1,404.00
Fungicides (500 grams)	kg	1	632.00	632.00
Fuel and Oil				8,794.00
Oil	liter	2	150.00	300.00
Diesel	liter	310	27.40	8,494.00
Plastic Mulch	roll	10	1,200.00	12,000.00
Depreciation Cost				1,398.00
Contingencies				10,234.76
TOTAL				211,418.01

OFF-SEASON BITTER GOURD PRODUCTION

Peak Harvest Season: February to April
Off Season: October-December
Productive Period: Semi Perennial to Perennial



Local Name: Ampalaya
Scientific Name: Momordica charantia

Market: Local Market

Benefits:

- ◆ Treatment for diabetes, type 2
- ◆ Treatment of hemorrhoids
- ◆ Tropical wrap or compress for minor wounds, burns and a wide variety of other skin issues
- ◆ Reduce inflammation
- ◆ Used to expel intestinal parasites

Nutritional Value:

- ◆ Vitamin C
- ◆ Vitamin B9
- ◆ Zinc
- ◆ Potassium
- ◆ Total dietary Fiber

By Products:

- ◆ Powder
- ◆ Tea
- ◆ Capsule/tablet

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Manaoag Villasis San Carlos City Malasiqui Urdaneta City	Sto. Tomas Bauang Naguilian San Fernando City Rosario	Salcedo Sto. Domingo Sta. Cruz Cabugao Narvacan	Vintar Pasuquin Sarrat Dingras Marcos

Cost and Return Analysis for One Hectare Off-Season

Bitter Gourd Production

Production (kgs)	= 13,000 kgs
Price per kilogram	= 80.00
Gross Sales	= 1,040,000.00
Production Cost	= 185,847.87
Net Income	= 854,152.11
Break-Even Price	= 14.30 per kilogram
Break-Even Volume	= 2,323.10 kgs
Benefit-Cost Ratio	= 4.60

**Production Cost of One Hectare
Off-Season Bitter Gourd Production**

ACTIVITY	MEASUREMENT	QUANTITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				90,565.00
Land Preparation				21,230.00
Plowing - Double passing	sqm	10,000	0.45	4,500.00
Harrowing-1st passing	sqm	10,000	0.38	3,800.00
Harrowing-2nd passing	sqm	10,000	0.38	3,800.00
Furrowing	MAD	2	400.00	800.00
Bed Preparation and Mulching	MD	34	245.00	8,330.00
Planting	MD	8	245.00	1,960.00
Trellising	MD	35	245.00	8,575.00
Fertlizer Application	MD	40	245.00	9,800.00
Irrigation Management	MD	24	245.00	5,880.00
Weeding	MD	30	245.00	7,350.00
Spraying	MD	26	245.00	6,370.00
Harvesting	MD	120	245.00	29,400.00
MATERIAL COST				83,283.75
Seeds (100grams/can)	can	8	1,850.00	14,800.00
Fertilizers				50,882.25
Organic Commercial	bag	100	300.00	30,000.00
Complete	bag	3	1,058.25	3,174.75
Urea	bag	9	1,037.50	9,337.50
Muriate of Potash	bag	3	1,417.50	4,252.50
Ammonium Sulfate	bag	2	495.00	990.00
Calcium Nitrate	bag	3	1,042.50	3,127.50
Insecticides	box	3	510.50	1,531.50
Fungicides (500 grams)	kg	1	632.00	632.00
Fuel and Oil				3,438.00
Oil	liter	1	150.00	150.00
Diesel	liter	120	27.40	3,288.00
Plastic Mulch	roll	10	1,200.00	12,000.00
Depreciation Cost				3,056.70
Contingencies				8,942.44
TOTAL				185,847.89

OFF-SEASON OKRA PRODUCTION



Peak Harvest Season: May-July
Off Season: October-November
Harvest Period: 50-65 days after planting
Productive Period: 1-3 months

Local Name: Okra
Scientific Name: *Abelmoschus esculentus*

Market: Local

Benefits:

- ◆ Reduce blood glucose level
- ◆ Contains flavonoids that may have anti-oxidant and hepato protective activities
- ◆ Rich in fiber that absorbs water and improves the bulk of stool
- ◆ Helps lower cholesterol
- ◆ Improves heart health
- ◆ Improves eye sight

Nutritional Value:

- ◆ Vitamin K
- ◆ Vitamin C
- ◆ Vitamin B6
- ◆ Vitamin B9
- ◆ manganese

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Urdaneta City Sta. Barbara Villasis Manaoag San Manuel	Luna San Fernando City	Salcedo Tagudin Cabugao	Badoc Dumalneg Nueva Era Piddig Sarrat

Cost and Return Analysis for One Hectare Off-Season Okra Production

Production (kgs)	= 16,000
Price per kilogram	= 30.00
Gross Sales	= 480,000
Production Cost	= 118,510.28
Net Income	= 361,489.73
Break-Even Price	= 7.41 per kilogram
Break-Even Volume	= 3,950.34 kilogram
Benefit-Cost Ratio	= 3.05

**Production Cost of One Hectare
Off-Season Okra Production**

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				42,175.00
Land Preparation				17,920.00
Plowing/Double Pass	sqm	10,000	0.45	4,500.00
Harrowing	sqm	10,000	0.38	3,800.00
Furrowing	MAD	2	400.00	800.00
Bed Preparation and	MD	36	245.00	8,820.00
Planting	MD	5	245.00	1,225.00
Pricking	MD	2	245.00	490.00
Fertilizer Application	MD	16	245.00	3,920.00
Irrigation Management	MD	4	245.00	980.00
Weeding	MD	10	245.00	2,450.00
Spraying	MD	2	245.00	490.00
Harvesting and sorting	MD	60	245.00	14,700.00
MATERIAL COST				69,360.50
Seeds (smooth green)	kg	3	895.00	2,685.00
Fertilizers				39,305.50
Organic Commercial Fertil-	bag	20	300.00	6,000.00
Complete	bag	11	1,058.00	11,638.00
Urea	bag	13	1,012.50	13,162.50
Muriate of Potash	bag	6	1,417.50	8,505.00
Insecticides	liters	23	350.00	8,050.00
Fungicide	kg	5	1,160.00	5,800.00
Fuel and Oil				1,520.00
Plastic Mulch	roll	10	1,200.00	12,000.00
Depreciation Cost				1,398.00
Contingencies				5,576.78
TOTAL				118,510.28

SQUASH PRODUCTION

Peak Harvest Season: May
Off Season: October
Harvest Period: 80-90 days after planting

Local Name: Kalabasa
Scientific Name: Cucurbita maxima Duchesue



Market: Local Consumer, Processor

Benefits:

- ◆ Helps treat arthritis, reduce stiffness, pain, swelling
- ◆ Good source of zinc that increase bone density
- ◆ Helps treat intensive problems
- ◆ Seeds are excellent sources of the anti-oxidant Vit E
- ◆ Excellent source of Vit. B; shoots and flower contain calcium, phosphorous and iron

Nutritional Value:

- ◆ Vitamin C
- ◆ Vitamin B6
- ◆ Vitamin A
- ◆ Vitamin B5
- ◆ Total dietary Fiber

By Products:

- ◆ Noodle

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
San Fabian Umingan Villasis Laoac Bautista	Naguilian San Fernando City Sudipen	Salcedo San Juan Sto. Domingo G.H. Del Pilar Cangao	Sarrat Badoc Burgos Bangui Batac

Cost and Return Analysis for One Hectare Squash Production

Production (kgs)	= 15,000
Price per kilogram	= 18.00
Gross Sales	= 270,000.00
Production Cost	= 73,273.05
Net Income	= 196,726.95
Break-Even Price	= 4.88
Break-Even Volume	= 4,070.73
Benefit-Cost Ratio	= 2.68

**Production Cost of One Hectare
Squash Production**

ACTIVITY	MEAS- UREMENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				36,970.00
Land Preparation				8,550.00
Plowing/Single Pass	sqm	10,000	0.48	4,750.00
Harrowing	sqm	10,000	0.38	3,800.00
Seed sowing using plastic tray	MD	4	245.00	980.00
Transplanting	MD	10	245.00	2,450.00
Fertilizer Application	MD	16	245.00	3,920.00
Irrigation Management	MD	8	245.00	1,960.00
Weeding	MD	15	245.00	3,675.00
Spraying	MD	5	245.00	1,225.00
Trellising	MD	10	245.00	2,450.00
Harvesting/hauling	MD	48	245.00	11,760.00
MATERIAL COST				30,031.00
Seeds (hybrid)	cans	4	823.00	3,292.00
Seed Inoculant	pack	1	50.00	50.00
Seedling Tray	pcs	85	67.00	5,695.00
Fertilizers				14,218.00
Organic	bag	10	300.00	3,000.00
Complete	bag	4	1,058.25	4,233.00
Urea	bag	4	1,037.50	4,150.00
Muriate of Potash	liter	2	1,417.50	2,835.00
Insecticides				2,960.00
Fungicides				1,200.00
Fuel and Oil				2,616.00
Depreciation Cost				2,922.00
Contingencies				3,350.05
TOTAL				73,273.05

PEANUT PRODUCTION

Peak Harvest Season: April-May
Off Season: October—December
Harvest Period: 90 days after planting

Local Name: Mani
Scientific Name: Arachis hypogaea

Market: Local



Benefits:

- ◆ Good for the heart
- ◆ Regulates blood sugar
- ◆ Prevents formation of gall stones
- ◆ Improves memory
- ◆ Helps fight depression

Benefits:

- ◆ Energy
- ◆ Niacin
- ◆ Folates
- ◆ Potassium
- ◆ magnesium

By Products:

- ◆ Oil
- ◆ Butter
- ◆ Brittle

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Bolinao Lingayen San Carlos City San Fabian Sison	Naguilian Rosario Bacnotan Bangar Balaoan	Bantay Sta. Lucia Candon City Sto. Domingo Sta. Cruz	Vintar Laoag City Pasuquin Badoc Piddig

Cost and Return Analysis for One Hectare Peanut Production

Production (kgs)	= 2,500
Price per kilogram	= 36.00
Gross Sales	=90,000.00
Production Cost	= 44,696.84
Net Income	= 45,303.16
Break-Even Price	= 17.88
Break-Even Volume	= 1,241.58
Benefit-Cost Ratio	= 1.01

Production Cost of One Hectare Peanut Production

ACTIVITY	MEASURE- MENT	QUANTITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				23,245.00
Seed Preparation				2,480.00
Drying	MD	4	245.00	980.00
Shelling	ganta	50	30.00	1,500.00
Land Preparation				6,450.00
Plowing	sqm	10,000	0.45	4,500.00
Harrowing	MMD	2	575.00	1,150.00
Furrowing	MAD	2	400.00	800.00
Planting	MD	10	245.00	2,450.00
Hilling Up/gulis	MAD	2	400.00	800.00
Fertilizer Application	MD	2	245.00	490.00
Irrigation Management	MD	4	245.00	980.00
Weeding	MD	4	245.00	980.00
Spraying	MD	2	245.00	490.00
Harvesting	can	250	32.50	8,125.00
MATERIAL COST				15,396.75
Seeds (Fresh/Unshelled)	kgs	300	36.00	10,800.00
Fertilizers				3,693.50
Complete	bag	3	1,058.25	3,174.75
Urea	kilogram	25	20.75	518.75
Insecticides	kgs	1	529.25	529.25
Fuel and Oil				274.00
Diesel	liter	10	27.40	274.00
Sacks	pcs	10	10.00	100.00
Depreciation Cost				3,873.00
Contingencies				2,182.09
TOTAL				44,696.84

STRING BEANS PRODUCTION

Harvest Maturity: 35-50 days after planting
or 10 days after flowering
Productivity Period: 2-3 months

Local Name: Sitaw
Scientific Name: *Vigna unguiculata*



Market: Local

Benefits:

- ◆ Lowers risk of gout
- ◆ Eliminates free radicals
- ◆ Reduces the risk of heart disease by improving the cardiovascular health
- ◆ Provides an adequate amount of magnesium which treats the sleep disorder effectively

Nutritional Value:

- ◆ Vitamin C
- ◆ Vitamin B9
- ◆ Magnesium
- ◆ Isoleucine
- ◆ Manganese

Major Producing Municipalities by Province

LA UNION	ILOCOS SUR	ILOCOS NORTE
San Fernando City Caba Bacnotan Aringay Agoo	Bantay Cabugao San Juan Candon City Sta. Cruz	Sarrat Dingras Batac City Laoag City San nicolas

Cost and Return Analysis for One Hectare String Beans Production

Production (kgs)	= 20,000
Price per kilogram	= 22.00
Gross Sales	=440,000.00
Production Cost	= 93,377.07
Net Income	= 346,622.93
Break-Even Price	= 4.67 per kilograms
Break-Even Volume	= 4,244.41 kilograms
Benefit-Cost Ratio	= 3.71

**Production Cost of One Hectare
String Beans Production**

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				45,640.00
Land Preparation (zero tillage)				
Planting and staking	MD	15	280.00	4,200.00
Fertilizer Application	MD	6	280.00	1,680.00
Irrigation Management	MD	8	140.00	1,120.00
Weeding	MD	12	280.00	3,360.00
Spraying	MD	6	280.00	1,680.00
Harvesting (24 harvest time)	MD	240	140.00	33,600.00
MATERIAL COST				11,193.40
Seeds	kgs	4	895.00	3,580.00
Fertilizers				5,340.00
Urea (46-0-0)	bag	3	1,000.00	3,000.00
Muriate of Potash (0-0 -60)	bag	2	1,170.00	2,340.00
Insecticides	liter	1	595.00	595.00
Fungicides	pack	1	698.00	698.00
Fuel and Oil				980.40
Oil	liter	1	150.00	150.00
Diesel	liter	24	34.60	830.40
Depreciation Cost				33,702.00
Contingencies				2,841.67
TOTAL				93,377.07

OFF-SEASON HOT PEPPER PRODUCTION

Peak Harvest Season: October-June
Off Season: July-September
Start of harvest: 60-95 days after planting
Productive Period: 5 to 6 months



Local Name: Sili
Scientific Name: Capsicum annum

Market: Local

Benefits:

- ◆ Boosts immune system
- ◆ Has anti-bacterial, anti-carcinogenic, analgesic and anti-diabetic properties
- ◆ Reduces LDL cholesterol levels in obese persons
- ◆ Contains capsaicin and could help protect from heart disease

Nutritional Value:

- ◆ Vitamin C
- ◆ Vitamin A
- ◆ Vitamin K
- ◆ Vitamin B6
- ◆ Potassium
- ◆ Calcium
- ◆ Magnesium
- ◆ Phosphorus
- ◆ fiber

By Products:

- ◆ Chili paste
- ◆ Chili powder
- ◆ Chili in oil

Major Producing Municipalities by Province

PANGASINAN	LA UNION
Sta. Maria Rosales Binalonan	Rosario

Cost and Return Analysis for One Hectare Off-Season Hot Pepper Production

Production (kgs)	= 10,000 kgs
Price per kilogram	= 60.00
Gross Sales	= 600,000.00
Production Cost	= 117,998.61
Net Income	= 482,001.39
Break-Even Price	= 11.80 per kilogram
Break-Even Volume	= 1,966.64 kilograms
Benefit-Cost Ratio	= 4.08

Production Cost of One Hectare Hot Pepper Production

Source: Ilocos Norte

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				79,900.00
Land Preparation				25,300.00
Plowing (single pass)	sqm	10,000	0.55	5,500.00
Harrowing (double pass)	sqm	10,000	0.80	8,000.00
Furrowing	MAD	2	300.00	600.00
Bed Preparation	MD	28	280.00	7,840.00
Mulching	MD	12	280.00	3,360.00
Seed Bed Preparation	MD	14	280.00	3,920.00
Transplanting	MD	25	280.00	7,000.00
Fertilizer Application	MD	32	280.00	8,960.00
Irrigation Management	MD	14	280.00	3,920.00
Weeding	MD	6	280.00	1,680.00
Spraying	MD	8	280.00	2,240.00
Harvesting (24 harvest time)	MD	192	140.00	26,880.00
MATERIAL COST				31,148.20
Seeds	cans	4	1,100.00	4,400.00
Fertilizers				12,300.00
Organic	bag	10	300.00	3,000.00
Complete (14-14-14)	bag	3	1,100.00	3,300.00
Urea (46-0-0)	bag	3	1,000.00	3,000.00
Muriate of Potash (0-0-60)	bag	2	1,500.00	3,000.00
Calcium Nitrate	bag	2	1,500.00	3,000.00
Insecticides	liter	1	595.00	595.00
Fungicides (500 grams per ox)	box	1	250.00	250.00
Fuel and Oil				1,603.20
Plastic Mulch	roll	10	1,200.00	12,000.00
Depreciation Cost				1,398.00
Contingencies				5,552.41
TOTAL				117,998.61

GINGER PRODUCTION

Maturity/Duration: 8-10 months

Local Name: Luya

Scientific Name: Zingiber officinale

Market: Local



Benefits:

- ◆ Stimulates gastric juice secretion
- ◆ Relieves cough and flu
- ◆ Treats migraine, travel sickness and rheumatoid arthritis
- ◆ Improves blood circulation and reduce fat deposits in the arteries
- ◆ Treats nausea, especially morning sickness
- ◆ Reduces muscle pain and soreness
- ◆ Reduces menstrual pain

Nutritional Value::

- ◆ Copper
- ◆ Carbohydrates
- ◆ Vitamin B6
- ◆ Manganese
- ◆ Magnesium

By Products:

- ◆ Salabat
- ◆ Candy

Major Producing Municipalities by Province

LA UNION	ILOCOS SUR	ILOCOS NORTE
Bagulin Pugo	Sinait Suyo G.H. Del Pilar Cervantes Sigay	Nueva Era Dumalneg Marcos Pagudpud

Cost and Return Analysis for Ginger Production

Production in kilograms	= 10,000 kgs
Price per kilogram	= 50.00
Gross Sales	= 500,000.00
Production Cost	= 159,180.00
Net Income	= 340,820.00
Break-Even Price	= 15.92 per kilogram
Break-Even Volume	= 3,183.60 kilograms
Benefit-Cost Ratio	= 2.14

**Production Cost of One Hectare
Ginger Production**

ACTIVITY	MEAS- UREMENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				35,670.00
Land Preparation				3,400.00
Plowing/Double Pass	MAD	8	200.00	1,600.00
Furrowing	MAD	4	200.00	800.00
Harrowing	MAD	4	200.00	800.00
Pulverizing	MAD	1	200.00	200.00
Seed Bed Preparation	MD	1	200.00	200.00
Uprooting & Planting	MD	25	200.00	5,000.00
Fertilizer Application	MD	6	200.00	1,200.00
Irrigation Management	MD	16	250.00	4,000.00
Weeding	MD	8	250.00	2,000.00
Spraying	MD	38	250.00	9,500.00
Harvesting (38 harvest time)	MD	50	25.00	1,250.00
Sorting	MD	190	48.00	9,120.00
MATERIAL COST				115,930.00
Seeds	kg	1,150	60.00	69,000.00
Fertilizers				46,780.00
Organic	bag	100	300.00	30,000.00
14-14-14	bag	11	1,100.00	12,100.00
0-0-60	bag	4	1,170.00	4,680.00
Sacks	pcs	15	10.00	150.00
Depreciation Cost				
Contingencies				7,580.00
TOTAL				159,180.00

SWAMP CABBAGE PRODUCTION

Harvest Season: Year-round

Local Name: Kangkong

Scientific Name: Ipomea aquatic

Market: Local



Benefits:

- ◆ Reduces cholesterols
- ◆ Treatment of jaundice and liver problems
- ◆ Useful in treating anemia
- ◆ Treatment of indigestion and constipation
- ◆ Anti-diabetic
- ◆ Protection against heart disease
- ◆ Prevention of cancer
- ◆ Beneficial for the eyes
- ◆ Boosts the body's immunity
- ◆ Treatment of skin diseases
- ◆ Rejuvenates skin
- ◆ Helps maintain healthy scalp

Nutritional Value:

- ◆ Vitamin C
- ◆ Vitamin A
- ◆ Iron
- ◆ Magnesium
- ◆ Vitamin B9

Cost and Return Analysis for One Hectare Upland Swamp Cabbage Production

Production (kgs)	= 25,000
Price per kilogram	= 5.00
Gross Sales	= 125,000.00
Production Cost	= 96,210.00
Net Income	= 28,789.60
Break-Even Price	= 3.85 per kilogram
Break-Even Volume	= 19,242.08 kilograms
Benefit-Cost Ratio	= .30

**Production Cost of One Hectare
Upland Kangkong Production**

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				27,000.00
Land Preparation				15,100.00
Plowing (single pass)	sqm	10,000	0.55	5,500.00
Harrowing (single pass)	sqm	10,000	0.40	4,000.00
Bed Preparation	MD	10	280.00	2,800.00
Mulching using rice straw	MD	10	280.00	2,800.00
Sowing/Planting	MD	10	280.00	2,800.00
Fertilizer Application	MD	24	140.00	3,360.00
Irrigation Management	MD	9	140.00	1,260.00
Weeding	MD	8	140.00	1,120.00
Harvesting (2 harvest time: 40 DAS and 20 days after 1st harvest)	MD	24	140.00	3,360.00
MATERIAL COST				64,188.00
Seeds	kg	2	525.00	1,050.00
Fertilizers				61,950.00
Organic	bag	200	300.00	60,000.00
Ammonium Sulfate (21-0-0)	bag	2	475.00	950.00
Urea (46-0-0)	bag	1	1,000.00	1,000.00
Fuel and Oil				1,188.00
Oil	liter	1	150.00	150.00
Diesel	liter	30	34.60	1,038.00
Depreciation Cost				463.00
Contingencies				4,559.40
TOTAL				96,210.40

GREEN CORN (PANLAGA) PRODUCTION

Peak Season: February-April
Off Season: July-September
Duration: 70-75 days

Local Name: Mais
Scientific Name: Zea mays



Market: Local Market, Baguio City

Benefits:

- ◆ Lowers risk colon cancer
- ◆ Rich sources of vitamins and minerals
- ◆ Controls diabetes & hypertension
- ◆ Reduces cholesterol absorption in body
- ◆ Improves bone strength
- ◆ Prevents anemia
- ◆ Reduces risks of hemorrhoids
- ◆ Helps maintain good vision and skin
- ◆ Boosts immune system

Nutritional Value:

- ◆ Carbohydrates
- ◆ Vitamin B5
- ◆ Vitamin B1
- ◆ Phos[horus]
- ◆ Vitamin B3

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Asingan	Tubao	Vigan City	Batac City
Binalonan	Bauang	Bantay	Laoag City
San Jacinto	Naguilian	Tagudin	Paoay
Bani	Caba	Magsingal	San Nicolas
Bolinao	Aringay	Candon City	Sarrat

Cost and Return Analysis for One Hectare Green Corn Production

Production (piece)	= 45,000 ears
Price per piece	= 5.00
Gross Sales	= 225,000.00
Production Cost	= 52,530.00
Net Income	= 172,470.00
Break-Even Price	= 1.17/piece
Break-Even Volume	= 10,506 pieces
Benefit-Cost Ratio	= 3.28

**Production Cost of One Hectare
Green Corn Production (Panlaga)**

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				15,000.00
Land Preparation				5,500.00
Plowing (double pass)	sqm	10,000	0.43	4,300.00
Furrowing	MAD	3	400.00	1,200.00
Planting	MD	6	250.00	1,500.00
Fertilizer Application	MD	2	250.00	500.00
Irrigation Management	MD	6	250.00	1,500.00
Hilling Up	MAD	2	500.00	1,000.00
Harvesting	MD	20	250.00	5,000.00
MATERIAL COST				33,800.00
Seeds	kg	20	1,100.00	22,000.00
Fertilizers				10,600.00
Complete (14-14-14)	bag	6	1,100.00	6,600.00
Urea (46-0-0)	bag	4	1,000.00	4,000.00
Fuel and Oil				1,200.00
Oil	liter	1	150.00	150.00
Diesel	liter	42	25.00	1,050.00
Depreciation Cost				1,290.00
Contingencies				2,440.00
TOTAL				52,530.00

WATER MELON PRODUCTION

Peak Harvest Season: March-April
Off Season: November-January
Maturity Days: 35-40 days after pollination
Duration: 3-4 months



Local Name: Pakwan
Scientific Name: Citrullus lanatus

Market: Local, Metro Manila

Benefits:

- ◆ Is a mild laxative
- ◆ Promotes flow of urine
- ◆ Helps to reduce blood pressure and supports the function of body organ
- ◆ Treats health ailments

Nutritional Value:

- ◆ Lycopene
- ◆ Vitamin C
- ◆ Carbohydrates
- ◆ Copper
- ◆ Vitamin B5

By Products:

- ◆ Wine

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Bani Alaminos City Infanta Anda Mangatarem	Balaoan Santol San Fernando City Bangar Caba	Sinit Narvacan Santa San Juan Sto. Domingo	Dingras Laoag City Solsona Bacarra San Nicolas

Cost and Return Analysis for One Hectare Water Melon Production

Production (kgs)	= 30,000
Price per kilogram	= 15.00
Gross Sales	= 450,000.00
Production Cost	= 116,159.67
Net Income	= 333,840.30
Break-Even Price	= 3.87per kilogram
Break-Even Volume	= 7,743.98 kilogram
Benefit-Cost Ratio	= 2.87

Production Cost of One Hectare Water melon Production

Source: Pangasinan

ACTIVITY	MEASURE- MENT	QUAN- TITY	UNIT COST (P)	AMOUNT (P)
LABOR COST				72,300.00
Land Preparation	hour	3	600.00	1,800.00
Mulching	MD	6	250.00	1,500.00
Seedling Preparation	MD	6	250.00	1,500.00
Transplanting	MD	6	250.00	1,500.00
Fertilizer Application	MD	72	250.00	18,000.00
Irrigation Management	MD	108	250.00	27,000.00
Spraying	MD	72	250.00	18,000.00
Harvesting	MD	12	250.00	3,000.00
MATERIAL COST				29,122.00
Seeds (50grams/can)	can	9	920.00	8,280.00
Seedling tray	pcs	40	45.00	1,800.00
Fertilizers				17,500.00
14-14-14	bag	5	1,200.00	6,000.00
16-16-16	bag	5	1,500.00	7,500.00
Urea	bag	3	1,100.00	3,300.00
Foliar	liter	2	350.00	700.00
Fungicides	kg	3	514.00	1,542.00
Depreciation Cost (plastic mulch)				3,666.67
Contingencies				11,071.00
TOTAL				116,159.67

OYSTER MUSHROOM PRODUCTION

Duration: 3 months

Local Name: Kabute

Scientific Name: Pleurotus ostreatus

Market: Local



Benefits:

- ◆ Lowers cholesterol levels
- ◆ Supports immune function
- ◆ Increases vitamin D levels
- ◆ Maintains healthy skin
- ◆ Contains natural insulin
- ◆ Increases metabolism
- ◆ Inhibits cancer
- ◆ Anti-oxidants
- ◆ Rich in zinc

Nutritional Value:

- ◆ Vitamin D
- ◆ Vitamin B3
- ◆ Vitamin B2
- ◆ Vitamin B5
- ◆ Copper

By Products:

- ◆ Lumpia
- ◆ Chicharon
- ◆ Patis

Cost and Return Analysis for Mushroom Production

Production in kilograms	= 212.50 kgs
Price per kilogram	= 160.00
Gross Sales	= 34,000.00
Production Cost	= 11,316.00
Net Income	= 22,684.00
Break-Even Price	= 53.25 per kilogram
Break-Even Volume	= 70.73 kilograms
Benefit-Cost Ratio	= 2.0

**Production Cost of
Mushroom Production (1,000—fruiting bags)**

ACTIVITY	MEASURE- MENT	QUANTITY	UNIT COST (P)	AMOUNT (P)
A. Labor Cost				3,000.00
1. Hauling and chopping of rice straw	MD	2	250.00	500.00
2. Bagging, sterilization and inoculation of fruiting	MD	10	250.00	2,500.00
B. Material				8,316.00
1. Rice straw				
2. Saw dust	kg	223	10.00	2,230.00
3. Rice bran	kg	56	10.00	560.00
4. PP plastic bag	pack	10	60.00	600.00
5. Steel drum	pc	1	750.00	750.00
6. PVC pipe	pcs	5	160.00	800.00
7. Rubber band	box	15	8.00	120.00
8. Cotton	roll	8	60.00	480.00
9. Denatured alcohol	bot	2	25.00	50.00
10. Alcohol lamp	pc	1	75.00	75.00
11. Nylon rope #8	roll	2	350.00	700.00
12. Sugar	kg	6	46.00	276.00
13. Lime	kg	5	35.00	175.00
14. Fire wood	bundle	100	15.00	1,500.00
Total Production Cost				11,316.00

DRAGON FRUIT PRODUCTION

Peak Harvest Season: July—September

Off Season: October—June

Maturity: 30-50 days after flowering

Local Name: Pitaya

Scientific Name: *Hylocereus undatus*

Market: Local



Benefits:

- ◆ Boosts immune system
- ◆ Helps in digestion
- ◆ Helps to lower blood glucose levels in type 2 diabetes
- ◆ Prevents formation of cancer causing free radicals
- ◆ Helps to control cholesterol

Nutritional Value:

- ◆ Vitamin c
- ◆ Total dietary Fiber
- ◆ Calcium
- ◆ Phosphorus
- ◆ Iron
- ◆ Vitamin b1, B2, B3

By Products:

- ◆ Cookies
- ◆ Ice cream
- ◆ Wine and vinegar
- ◆ Tea
- ◆ Spring roll
- ◆ Soap
- ◆ Yogurt

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
Burgos Mangatarem San Jacinto Balungao	Bauang	Candon City	Burgos Bacarra Piddig

Cost and Return Analysis for One Hectare

ITEM	1st Year	2nd Year	3rd Year	4th Year
Yield				
Fruit		5,500	11,000	18,500
Cuttings		6,000	10,000	11,000
Farmgate Price				
Fruit (per kilogram)		85	65	65
Cuttings (per piece)		50	30	30
Sales Generated		767,500	1,015,000	1,532,500
Cost of Production	403,087.50	223,577.50	227,577.50	231,577.50
carry over expenses from year 1		403,087.50		
TOTAL COST OF PRODUCTION		626,665.00	227,577.50	231,577.50
Net Income	(403,087.50)	140,835.00	787,422.50	1,300,922.50
Break-even Price per kilogram		113.94	20.69	12.52
Break-even Volume		7,372.53	3,501.19	3,562.73
Benefit Cost Ratio	(1.00)	0.63	3.46	5.62

**Production Cost of One Hectare
Dragon Fruit Production (1,111 post)**

ITEM	1st Year	2nd Year	3rd Year	4th Year
ESTABLISHMENT	341,937.50	86,937.50	86,937.50	86,937.50
<i>Labor</i>	16,000.00			
<i>Materials</i>	325,937.50	86,937.50	86,937.50	86,937.50
Concrete Post & Used Tires (depreciation cost)	69,437.50	69,437.50	69,437.50	69,437.50
Planting Materials (4pcs/post)	222,200.00			
Water pumps & irrigation hose (depreciation cost)	17,500.00	17,500.00	17,500.00	17,500.00
Rags (@ 25/roll @ 72 rolls)	1,800.00			
Garden soil @ P 1,500/truck load @ 10 MD (10 tons)	15,000.00			
CARE AND MAINTENANCE	61,150.00	136,640.00	140,640.00	144,640.00
<i>Labor</i>	21,000.00	24,000.00	28,000.00	32,000.00
Irrigation (5mo. @ 2X/mo. @4MD)	8,000.00	8,000.00	8,000.00	8,000.00
Fertilization (4X@2MD)	1,600.00	1,600.00	1,600.00	1,600.00
Spot Weeding (20MD X 20MD)	4,000.00	4,000.00	4,000.00	4,000.00
Spraying Herbicide (2MD)	400.00	400.00	400.00	400.00
Vine training, pruning and tying (20MD)	4,000.00	4,000.00	4,000.00	4,000.00
Harvesting, sorting, packing (15MD)	3,000.00	6,000.00	10,000.00	14,000.00
<i>Materials</i>	40,150.00	112,640.00	112,640.00	112,640.00
Organic Fertilizer	26,400.00	52,800.00	52,800.00	52,800.00
Complete Fertilizer	3,960.00	13,490.00	13,490.00	13,490.00
Urea	1,230.00	14,670.00	14,670.00	14,670.00
Muriate of Potash	3,520.00	26,640.00	26,640.00	26,640.00
Herbicide	1,440.00	1,440.00	1,440.00	1,440.00
Diesel	3,600.00	3,600.00	3,600.00	3,600.00
TOTAL	403,087.50	223,577.50	227,577.50	231,577.50

MANGO PRODUCTION

Peak Harvest Season: October—April
Off Season: May—September
Maturity Days: 120 days

Local Name: Manga
Scientific Name: *Mangifera indica*



Market: Local, Processor, International

Benefits:

- ◆ Cures acne
- ◆ Restricts ageing
- ◆ Promotes brain health
- ◆ Cures anemia and helps in pregnancy
- ◆ Maintains blood pressure
- ◆ Reduces cancer hazards and lowers cholesterol levels
- ◆ Helps in digestion and prevents from the constipation
- ◆ Helps to lose weight

By Products:

- ◆ Soluble Fiber
- ◆ Vitamin B6
- ◆ Vitamin A
- ◆ Vitamin C
- ◆ Potassium
- ◆ Magnesium
- ◆ Copper

By Products:

- ◆ Dried Candies
- ◆ Wine, Juice and Vinegar
- ◆ Sauce, Jam and

Major Producing Municipalities by Province

PANGASINAN	LA UNION	ILOCOS SUR	ILOCOS NORTE
San Carlos City Malasiqui	Aringay	Candon City	Laoag City
Urdaneta City	Bauang	Sta. Cruz, Tagudin	Badoc
Mangatarem	Naguilian	Salcedo	Nueva Era
Pozzorubio	San Fernando	Suyo	Vintar
	City Burgos		Banna

Cost and Return Analysis for One Hectare Mango Production

ITEM	1-6 Years	7th Year	8th Year	9th Year	10th Year
Production (fruit)-kg	4,400.00	8,800.00	13,200.00	17,600.00	22,000.00
Farm Gate Price	20.00	20.00	20.00	20.00	20.00
Sales Generated	88,000.00	176,000.00	264,000.00	352,000.00	440,000.00
Total Cost of Production	175,461.52	176,726.85	92,793.33	96,321.33	99,849.33
Net Income	(87,461.52)	(726.85)	171,206.67	255,678.67	340,150.67
Benefit-Cost Ratio	(.50)	(.0041)	1.85	2.65	3.41

**Production Cost of One Hectare
Mango Production**

ITEM	1-6 Years	7th Year	8th Year	9th Year	10th Year
ESTABLISHMENT	6,685.00				
Labor	3,500.00				
Clearing/Cleaning/	2,500.00				
Staking/Digging/ Planting	1,250.00				
Materials	3,185.00				
Planting Materials (44 pcs & 5 pcs replanting)	3,185.00				
CARE AND MAINTENANCE	160,421.21	85,014.60	88,374.60	91,734.60	95,094.60
Labor	97,000.00	23,000.00	23,500.00	24,000.00	24,500.00
Irrigation (5mo. @ 2X/ mo. @4MD)	36,000.00	6,000.00	6,000.00	6,000.00	6,000.00
Fertilization	6,000.00	1,000.00	1,000.00	1,000.00	1,000.00
Ring Weeding (every month for the 1st year and every 2 months for the succeeding year)	42,000.00	6,000.00	6,000.00	6,000.00	6,000.00
Spraying Herbicide (4 times a year)	5,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Harvesting, sorting, pack- ing	7,500.00	8,500.00	9,000.00	9,500.00	10,000.00
Materials	63,421.21	62,014.60	64,874.60	67,734.60	70,594.60
Fertilizer	4,561.21	2,294.60	2,294.60	2,294.60	2,294.60
Pesticide (combination of insecticide and fungicide)	14,350.00	12,350.00	12,350.00	12,350.00	12,350.00
Flower Inducer	41,650.00	41,650.00	41,650.00	41,650.00	41,650.00
Kaing	2,860.00	5,720.00	8,580.00	11,440.00	14,300.00
Contingencies	8,355.31	4,250.73	4,418.73	4,586.73	4,754.73
TOTAL	175,461.52	89,265.33	92,793.33	96,321.33	99,849.33

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