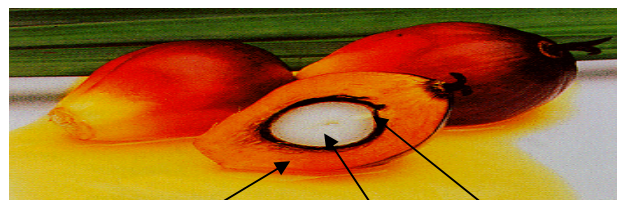


## GENERAL INFORMATION

The Hybrid Oil Palm plant called "TENERA" (*Elaeis Guineensis Jacq*) is a cross breed from Dura X Pesifera. It is commercially cultivated in the tropics in Africa, in America, and in Southeast Asia.

The two types of oil produced by the oil palm are Crude Palm Oil and Palm Kernel Oil commonly referred to as CPO and PKO, respectively. The CPO is deep red orange liquid comprises mainly of fatty acids of which about 52% are present glycerides.



SHELL KERNEL MESOCARP

Palm Oil is a semi-solid oil, rich in Vitamins. The major fatty acids present are oleic, palmitic and linoleic, The somewhat unusual triglyceride structure gives it a high degree of versatility among other edible oils. Palm Oil owes its deep red color to the presence of carotene and is thus a potent source of Vitamin A

## USAGE

### FOOD USES:



Household cooking, Industry Frying, Margarine, Shortening Vegetable Ghee, Ice-Cream, Non-Dairy Creamers

### NON-FOOD USES:



Soap and Detergent, Oleochemical (fatty acids, fatty alcohol, fatty amines and Glycerol, methyl esters), Cosmetics, Pharmaceuticals, Candle, Diesel, Drilling Mud

### Oil Palm By-Products (Trunks, Fronds, Empty Bunches & Fiber)



PROJECTED PHILIPPINE CONSUMPTION OF PALM OIL AND PALM KERNEL OIL 2006-2010 (in MT)		
Year	Vol. of Palm Oil *	Vol. of Palm Kernel Oil **
2006	118,091	8,106
2007	123,499	8,282
2008	129,155	8,463
2009	135,071	8,647
2010	141,257	8,836
<b>Average</b>	<b>129,415</b>	<b>8,467</b>

\* Based on 4.58% annual consumption growth rate with base average volume of 94,400 MT.

\*\* Based on 2.18% average annual consumption growth rate with base average volume of 7,277 MT.

PHILIPPINE INDUSTRY SITUATIONER		
PRODUCT	PRODUCTION PER YEAR (in MT)	SHORTFALL (%)
Palm Oil	54,000	42.5
Palm Kernel	7,000	9.00

**US\$ 14.83M or P 840.03M**  
**Worth of Importation**

CARAGA OIL PALM DEVELOPMENT STATUS (As of 2004)			
Provinces	AREA (has.)	Year Planted	STATUS
Agusan del Norte	229	1999 to 2002	Immature Newly Planted
Agusan del Sur	14,036.76	1981 to 2004	Immature Newly Planted Replanting in 2006
Surigao del Sur	33.50	2001 to 2003	Immature Newly Planted

2005 PROPOSED AREA FOR OIL PALM PLANTING (Validated Areas in Hectares)	
PROVINCES/ CITY	AREA (Has)
Agusan del Norte	200
Butuan City	200
Agusan del Sur	1000
Surigao del Sur	900
<b>TOTAL</b>	<b>2,300</b>

## INVESTMENT ENTRY POINTS

TARGET FOR PLANTING & REPLANTING 2004-2010 (in Hectares)							
ACTIVITY	COVERED YEAR						
	2004	2005	2006	2007	2008	2009	2010
Planting	3220	3050	2100	1400	1100	1000	1000
Replanting		4000		4025			

Source : Philippine Coconut Authority

SUITABLE AREAS FOR OIL PALM PRODUCTION IN CARAGA REGION	
Location	Area (has.)
Agusan del Norte	10,000
Agusan del Sur	80,000
Surigao del Norte	-
Surigao del Sur	12,000
<b>TOTAL</b>	<b>102,000</b>

In view of the increasing domestic demand for palm oil and the wiliness of the Filipinas Palmoil Plantations, Inc. to inter into out-growers marketing scheme with appropriate cooperatives, the DA, PCA, DAR, NADC LGUs, and other government agencies launched the Caraga Oil Palm Project.

The Project intends to establish 4,000 hectares of oil palm plantation within Caraga Region with initial development in the cluster areas of Butuan City and the surrounding municipalities of Las Nieves, Agusan del Norte, Hinatuan, Surigao del Sur, Esperanza and Bayugan, Agusan del Sur.

To date the Project has planted a total of 92 has. Oil palm with financial assistance coming from QUEDANCOR-LBP Financing Relay Scheme.

PALM OIL MILLS IN CARAGA (FFB Buyers)		
Name of Company	Location	Capacity
Filipinas Palmoil Plantations, Inc. (FPPI)	Rosario, Agusan del Sur	36 tons FFBs/hr
AGUMIL Phil (Agusan Plantation, Inc.)	Manat, Trento, Agusan del Sur	20 tons FFBs/hr.

Note: Buying price of FFBs as of June 2004 is P4,000/ton

## OTHER BENEFITS FROM OIL PALM PLANTATION

- ☞ Job Employment
- ☞ Tax Income for LGUs
- ☞ Livelihood Project Oil Palm by-products such as: Baskets, Amakan, Fertilizer, Charcoal, etc
- ☞ Intercropping of Peripheral Crops during 1<sup>st</sup> 3years of Oil Palm Development

**ESTIMATED DEVELOPMENT COST IN DIFFERENT LAND AREA OF SPECIFICATION**

ACTIVITIES	AREA 1	AREA 2	AREA 3	AREA 4
<b>1<sup>st</sup> YEAR</b>				
Clearing/Land Prep	5,100	5,100	2,400	5,100
Roads/Drains/Culverts	8,300	-	-	-
Lining/Holing / Seedling Dispersal/Transport/Planting	2,360	2,360	2,360	2,360
Cost of 140 Seedling X P80	11,200	11,200	11,200	-
Weeding/Slashing	5,040	5,040	5,040	5,040
Manuring/Fertilizer	2,551	2,551	2,551	2,551
Pest & Diseases (Provision)	1,132	1,132	1,132	1,132
Mounding/Propping/Supplying	480	480	480	480
Supervision	1,000	1,000	1,000	1,000
<b>Sub-Total:</b>	<b>37,163</b>	<b>28,863</b>	<b>25,163</b>	<b>16,663</b>
<b>2<sup>nd</sup> Year</b>				
Drains/Roads-Maintenance	1,000	-	-	-
Weeding/Slashing	5,040	5,040	5,040	5,040
Manuring/Fertilizer	3,133	3,133	3,133	3,133
Pest & Diseases (Provision)	500	500	500	500
Supervision	1,000	1,000	-	-
<b>Sub-Total:</b>	<b>10,673</b>	<b>9,673</b>	<b>8,673</b>	<b>8,673</b>
Drains/Roads-Maintenance	1,000	-	-	-
Weeding/Slashing	5,040	5,040	5,040	5,040
Manuring/Fertilizer	4,181	4,181	4,181	4,181
Pest & Diseases (Provision)	500	500	500	500
Scout Harvesting/ Sanitation	780	780	780	780
Supervision	1,000	1,000	-	-
<b>Sub-total</b>	<b>12,501</b>	<b>11,501</b>	<b>11,501</b>	<b>11,501</b>
<b>GRAND TOTAL</b>	<b>60,337</b>	<b>50,037</b>	<b>44,337</b>	<b>35,387</b>

Note: Area 1 – Large contiguous area. Plantation Type Development  
 Area 2 – Adequate 2<sup>nd</sup> Growth Logged Over Areas (excluding cost of road, Drainage, construction)  
 Area 3 – Brushland/ Grassland or Inadequate 2<sup>nd</sup> Growth Logged Over Areas (Planter to counterpart on supervision cost)  
 Area 4 – Considering Government Equity/Subsidy for seedling (Planter to counter on supervision cost)

**QUEDANCOR INTEREST COST PER YEAR**

LOAN AMOUNT/HA	1 <sup>st</sup> Yr. Interest	2 <sup>nd</sup> Yr. Interest	3 <sup>rd</sup> Yr. Interest	TOTAL
35,000.00	6,247.50	6,247.50	6,247.50	18,742.00
40,000.00	7,140.00	7,140.00	7,140.00	21,420.00
45,000.00	8,032.00	8,032.00	8,032.00	24,097.50
50,000.00	8,925.00	8,925.00	8,925.00	26,775.00
60,000.00	10,710.00	10,710.00	10,710.00	32,130.00

Note: Interest Rate: 14% Service Fee: 3%; GRT: 5% of int. & SF

**LANDBANK of the PHILIPPINES**

**Innovative Financing Scheme**

Term - 12 % Interest rate per annum, simple & diminishing  
 Interest Rate - 2% per annum Supervision Fee  
 Penalty - 3% per annum on the 61<sup>st</sup> day after loan amortization due date  
 Terms - 12 years to pay with grace period as follows:  
 Principal – 6 years grace period from initial release  
 Interest - 5 years grace period from initial release  
 Collaterals - Deed of Assignment of Produce  
 Promissory Notes & JSS/CSA

**YIELD TABLE & PROJECTED INCOME PER HECTARE**

Year	Projected Yield/ha (MT)	Gross Income @ P3,000/Ton	P 900/Ton Production Cost	Projected Net Income (Peso)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	6	18,000	5,400	12,600
5	10	30,000	9,000	21,000
6	15	45,000	13,500	31,500
7	19	57,000	17,000	40,000
8	20	60,000	18,000	42,000
9	21	63,000	18,900	44,100
10	23	69,000	20,700	48,300
11	23	69,000	20,700	48,300
12	22	66,000	19,800	46,200
13	22	66,000	19,800	46,200
14	22	66,000	19,800	46,200
15	21	63,000	18,900	44,100
16	21	63,000	18,900	44,100
17	20	60,000	18,000	44,100
18	20	60,000	18,800	44,100
19	20	60,000	18,800	44,100
20	19	57,000	17,100	39,900
21	19	57,000	17,100	39,900
22	19	57,000	17,100	39,900
23	19	57,000	17,100	39,900
24	18	54,000	16,200	37,800
25	18	54,000	16,200	37,800

**REFERENCES:**

1. Food & Agribusiness Yearbook & Directory, Millennium Edition
2. Filipinas Palm Oil Plantations, Inc. (FPPI)
3. Philippine Coconut Authority (PCA)
4. Malaysian Palm Oil Promotion Council

For more inquiries, please contact:

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# CARAGA OIL PALM INDUSTRY

