## TEN-YEAR ESTIMATED COST & RETURN ANALYSIS OF ONE-HECTARE DURIAN-LAKATAN INTERCROPPING

COST AND RETURN PER HECTARE PER YEAR (P)										
	1	2	3	4	5	6	7	8	9	10
MARKETABLE YIELD (kg) 1. Lakatan 2. Durian	20,100	33,800	17,728 -	- 1,000	3,000	- 5,000	- 8,000	- 11,000	- 14,000	- 17,000
GROSS RETURN (P) CUMULATIVE GROSS RETURN PRODUCTION COST A. Establishment Cost	221,100 221,100	371,800 592,000	195,000 787,900	30,000 817,900	90,000 907,900	150,000 1,057,900	240,000 1,297,900	330,000 1,627,900	420,000 2,047,900	510,000 2,557,900
1. Lakatan	35,200	-	-	-	-	-	-	-	-	-
2. Durian	7,300	-	-	-	-	-	-	-	-	-
Sub-total	42,500	-	-	-	-	-	-	-	-	-
B. Care and Maintenance     1. Lakatan     2. Durian	76, 900 5,600	53,700 5,900	46,100 11,300	20,800	23,600	26,900	30,400	34,200	36,000	37,800
Sub-total	82,500	59,600	57,400	20,800	23,600	26,900	30,400	34,200	36,000	37,800
C. Harvesting & Postharvest Handling 1. Lakatan 2. Durian	22,800 -	35,600 -	30,700	1,400	3,300	6,100	7,300	8,000	8,300	8,900
Sub-total	22,800	35,600	30,700	1,400	3,300	6,100	7,300	8,000	8,300	8,900
TOTAL PRODUCTION COST CUMULATIVE PRODUCTION COST	147,800 147,800	95,200 243,000	,	22,200 353,300	26,900 380,200	33,000 413,200	37,700 450,900	42,200 493,100	44,300 537,400	46,700 584,100
NET RETURN CUMULATIVE NET RETURN		276,600 349,900	106,900 456,800	7,800 464,600	63,100 527,700	117,000 644,700	202,300 847,000	287,800 1,134,800	375,700 1,510,500	463,300 1,973,800

#### Assumptions:

#### Lakatan:

- 2000 plants/ha (Tissue Cultured)
- 5% per year increase in prices of labor & Material inputs
- Bunch weight from: 1) Plant Crop—19 kgs/bunch; 2) 1st follower—20 kgs/bunch;
  - 3) 2<sup>nd</sup> Follower—16 kgs/bunch; 4) 3<sup>rd</sup> follower—12 kgs/bunch;
  - 5) 4th follower—10 kgs/bunch
- Grading and Farm Gate Price of Fruits: Class A—60%; P12.00/kg

Class B—30%; 10.00/kg Class C—10% 8.00/kg

#### Durian

- 125 plants/ha
- 5% increase in prices of labor and material inputs
- Bearing stage starts at year 4
- · Average weight of fruit— 2kg/fruit
- Number of fruits/tree— Y4= 5; Y5= 15; Y6 = 25; Y7= 40; Y8= 55; Y9= 50; Y10 = 85
- 20% fruit rejects
- Farm Gate Price of Fruit = P 30.00/kg

Produced by:

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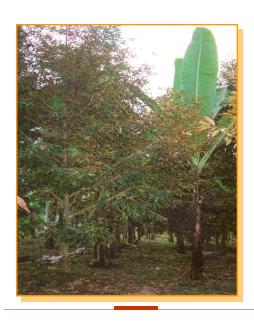


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# LAKATAN-DURIAN INTERCROPPING



Lakatan at 10 months to One (1) year could generate a return of P70,000.00 to P100,000.00 a year.

The current interest for the planting of durian by small and large scale landholders is attributed to the profitability of the crop and its growing demand in both local and export markets.

Since it takes 3 to 5 years before durian bears fruits, technology advancement enables durian farmers to generate income earlier by planting fast growing profitable intercrop, one of which is Lakatan banana which bears fruits in 10 months to a year.

This leaflet serves as a basic reference in establishing a one-hectare Lakatan-Durian intercropping project.

#### WHY LAKATAN?

- + Lakatan serves as a nurse crop to durian seedlings since it provides partial shade during its early vegetative stage of growth.
- + Lakatan is a fast growing plant that bears fruit in 10 months to one year.
- + Lakatan is a profitable intercrop. A hectare could generate a return of P70,000.00 to P100,000.00 a year.

#### LAKATAN MANAGEMENT

#### **CLIMATE**

Banana thrives best in areas with well distributed rainfall. It is sensitive to strong winds.

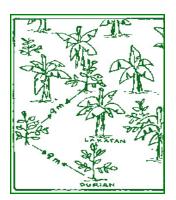
#### **PROPAGATION**

Propagate using suckers, corms and tissue cultured plantlets.

# LAY-OUT AND PLANTING SCHEME

As a nurse crop, establish Lakatan ahead of time.

- a. Plant Lakatan at a distance of 2.5 x 2 meters to 3 x 3 meters or 1,111 to 2,000 plants per hectare
- b. When Lakatan plants are 5-6 months old, plant the durian in-between rows of Lakatan at a distance of 9 x 9 meters or 8 x 10 meters (quincunx).



#### **MAINTENANCE**

Perform ring weeding at the base of the plant once a month. Fertilize based on soil analysis or apply 2:1:2 ratio of NPK per hill.

#### SUCKER CONTROL

Select good suckers. Maintain 1-2 suckers per hill and cover the cut portion with soil.

# STEM/MAT SANITATION

Remove dry leaf sheaths every 45 to 60 days. Pile at the center of the row.



## **LEAF PRUNING**

Trim leaves which are 50% dried. Do this weekly or as the need arises.



# **HARVESTING**

Harvest fruits from 10 months to one year. When durian trees start to bear fruits, cut down the banana plants.

#### **DURIAN MANAGEMENT**

- 1. Prune unnecessary branches.
- 2. Irrigate during dry months or periods of low rainfall.
- 3. Maintain a 7.5 m plant height to facilitate easier crop protection activities such as spraying
- 4. Practice thinning in flowers and fruits.
- 5. Apply appropriate insecticide to control seedling to productive stage.
- Harvest durian fruits at 106-108 days old (local varieties); 112-113 days old (Chanee); and 125 days old (Monthong).