



Cacao Farm Forcasted Costs and Returns for 1 Hectare (1000 Trees per Ha.)

	Year 1	Year 2	Year 3	Year 4	Year 5
Yield					
No of Cacao Trees	1000	1000	1000	1000	1000
Average Pods per tree per year	0	0	54	79	90
Average pods per area per year	0	0	54000	79000	90000
Average Pod index (wet)	7	7	7	7	7
Average Pod index (dry)	20	20	20	20	20
Wet Beans (kg)	0	0	7714	11286	12857
Dried beans (Kg)	0	0	2700	3950	4500
Dried Fermented beans (Kg)	0	0	2700	3950	4500
Gross Value of Beans					
Wet beans @ 40 / Kg	-	-	308,500.00	451,400.00	514,200.00
Dried Beans @ 140 / kg	-	-	378,000.00	553,000.00	630,000.00
Dried Fermented Beans @ 150/ Kg	-	-	405,000.00	592,500.00	675,000.00
Less: Investment Costs					
A. Materials					
1. Tools and Fence					
Knapsack sprayer, bolo, pruners, etc.	5,000.00				
Fencing Mat'ls. (Barb Wire and Hog Wire)	25,000.00				
2. Seedlings (PDS Certified - Filipino Aromatico)					
@60 each x no. of trees	60,000.00				
Add: 20% contingency for mortality	12,000.00	6,000.00	3,000.00		
Temporary Shading @10 each	10,000.00	8,000.00	6,000.00		
3. Agricultural Lime for ph correction	2,200.00				
4. Fertilizer	17,300.00	17,300.00	24,600.00	24,600.00	24,600.00
5. Composting	23,800.00	23,800.00	23,800.00	23,800.00	23,800.00
6. Agri. chemicals (foliar; fungicide; insecticide)	2,500.00	1,400.00	1,900.00	2,400.00	2,800.00
7. Herbicide Spray	1,100.00	1,100.00	900.00	600.00	300.00
8. Plastic Sleeves for CPB control	-	800.00	3,600.00	6,100.00	7,300.00
TOTAL MATERIALS COST (PHP)	158,900.00	58,400.00	63,800.00	57,500.00	58,800.00
B. Labor					
1. Clearing and Fencing	20,700.00				
2. Lay out / Staking	4,200.00				
3. Digging of holes	6,600.00				
4a. Planting	6,600.00				
4b. Shading (If monocrop or no natural shades)	5,000.00	5,000.00			
5a. Round weeding and mulching	19,800.00	19,800.00	9,900.00		
5b. Watering	13,200.00	13,200.00	6,600.00		
6. Foliar Spray	4,000.00	3,000.00	2,000.00	3,200.00	4,000.00
7. Herbicide Spray	2,000.00	2,000.00	1,500.00	1,200.00	600.00
8. Dolomite application / liming for soil pH correctior	900.00	900.00	900.00	900.00	900.00
9. Fertilizer Application	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
10. Tree Pruning, Chupon removal, Shaping	1,700.00	6,600.00	6,600.00	7,400.00	5,600.00
11. Pod Sleeveing	-	1,300.00	5,900.00	10,200.00	12,100.00
12. Harvesting / Pod Breaking	-	6,400.00	31,000.00	53,700.00	63,800.00
TOTAL LABOR COST (PHP)	87,200.00	60,700.00	66,900.00	79,100.00	89,500.00
Net Income from wet beans (PhP)	(246,100.00)	(119,100.00)	177,800.00	314,800.00	365,900.00
Net Income from Dried beans (PhP)	(246,100.00)	(119,100.00)	247,300.00	416,400.00	481,700.00

*The above cost and returns figures were estimated based on the study from existing cacao farms by CIDAMi and PDS.



Desmond Farm and Nursery

FORECAST CASHFLOW (Revised to Higher Quality Cacao Beans with PDS Certified)										
Years	Forecast Gross Income	Forecast Material Cost	Forecast Labor Cost	Management Cost (15%)	Taxable Net Income	Income Tax (20%)	Net Income	Corporate Partners (45% for Initial Land & Equip't. Lease Shares)	Farm Partners (40% Initial Investor Shares)	Desmond Farm (15% Royalty Shares)
0	-	90,000	38,100	19,200	-	-	-	(350,000)	(420,000)	-
1	-	68,900	49,100	17,700	-	-	-	-	-	-
2	-	58,400	60,700	17,900	-	-	-	-	-	-
3	378,000	63,800	66,900	37,100	210,200	42,000	168,200	75,700	67,300	25,200
4	553,000	57,500	79,100	62,500	353,900	70,800	283,100	127,400	113,200	42,500
5	630,000	58,800	89,500	72,300	409,400	81,900	327,500	147,400	131,000	49,100
6	642,600	60,000	91,300	73,700	417,600	83,500	334,100	150,300	133,600	50,200
7	655,200	61,200	93,100	75,100	425,800	85,200	340,600	153,300	136,200	51,100
8	667,800	62,300	94,900	76,600	434,000	86,800	347,200	156,200	138,900	52,100
9	680,400	63,500	96,700	78,000	442,200	88,400	353,800	159,200	141,500	53,100
10	693,000	64,700	98,500	79,500	450,300	90,100	360,200	162,100	144,100	54,000
11	705,600	65,900	100,200	80,900	458,600	91,700	366,900	165,100	146,800	55,000
12	718,200	67,000	102,000	82,400	466,800	93,400	373,400	168,000	149,400	56,000
13	730,800	68,200	103,800	83,800	475,000	95,000	380,000	171,000	152,000	57,000
14	743,400	69,400	105,600	85,300	483,100	96,600	386,500	173,900	154,600	58,000
15	756,000	70,600	107,400	86,700	491,300	98,300	393,000	176,900	157,200	58,900
16	768,600	71,700	109,200	88,200	499,500	99,900	399,600	Transferred	339,700	59,900
17	781,200	72,900	111,000	89,600	507,700	101,500	406,200	Transferred	345,300	60,900
18	793,800	74,100	112,800	91,000	515,900	103,200	412,700	Transferred	350,800	61,900
19	806,400	75,300	114,600	92,500	524,000	104,800	419,200	Transferred	356,300	62,900
20	819,000	76,400	116,400	93,900	532,300	106,500	425,800	Transferred	361,900	63,900
21	831,600	77,600	118,100	95,400	540,500	108,100	432,400	Transferred	367,500	64,900
22	844,200	78,800	119,900	96,800	548,700	109,700	439,000	Transferred	373,200	65,800
23	856,800	80,000	121,700	98,300	556,800	111,400	445,400	Transferred	378,600	66,800
24	869,400	81,100	123,500	99,700	565,100	113,000	452,100	Transferred	384,300	67,800
25	882,000	82,300	125,300	101,200	573,200	114,600	458,600	Transferred	389,800	68,800
							IRR	24%	22%	



Desmond Farm and Nursery

UPDATED REVISED FORECAST REVENUE... (CONTINUE BELOW)

Area (ha)	Year 0 Investment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
0.05	(21,000)	-	-	3,365	5,660	6,550	6,680	6,810	6,945	7,075	7,205	7,340	7,470	7,600	7,730	7,860
0.1	(42,000)	-	-	6,730	11,320	13,100	13,360	13,620	13,890	14,150	14,410	14,680	14,940	15,200	15,460	15,720
0.2	(84,000)	-	-	13,460	22,640	26,200	26,720	27,240	27,780	28,300	28,820	29,360	29,880	30,400	30,920	31,440
0.3	(126,000)	-	-	20,190	33,960	39,300	40,080	40,860	41,670	42,450	43,230	44,040	44,820	45,600	46,380	47,160
0.4	(168,000)	-	-	26,920	45,280	52,400	53,440	54,480	55,560	56,600	57,640	58,720	59,760	60,800	61,840	62,880
0.5	(210,000)	-	-	33,650	56,600	65,500	66,800	68,100	69,450	70,750	72,050	73,400	74,700	76,000	77,300	78,600
0.6	(252,000)	-	-	40,380	67,920	78,600	80,160	81,720	83,340	84,900	86,460	88,080	89,640	91,200	92,760	94,320
0.7	(294,000)	-	-	47,110	79,240	91,700	93,520	95,340	97,230	99,050	100,870	102,760	104,580	106,400	108,220	110,040
0.8	(336,000)	-	-	53,840	90,560	104,800	106,880	108,960	111,120	113,200	115,280	117,440	119,520	121,600	123,680	125,760
0.9	(378,000)	-	-	60,570	101,880	117,900	120,240	122,580	125,010	127,350	129,690	132,120	134,460	136,800	139,140	141,480
1.0	(420,000)	-	-	67,300	113,200	131,000	133,600	136,200	138,900	141,500	144,100	146,800	149,400	152,000	154,600	157,200

...UPDATED REVISED FORECAST REVENUE

Area (ha)	Year 0 Investment	LEASE TERM PERIOD / RIGHTH OF OWNERSHIP	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	IRR	Forecast Revenue
0.05	(21,000)	Normal	7,990	8,125	8,255	8,385	8,515	8,650	8,780	8,910	9,040	9,170	20.4%	174,110.00
0.1	(42,000)	Plus Lease Amount After Term Period 24 Years	15,980	16,250	16,510	16,770	17,030	17,300	17,560	17,820	18,080	38,980	20.4%	368,860.00
0.2	(84,000)	Plus Lease Amount After Term Period 23 Years	31,960	32,500	33,020	33,540	34,060	34,600	35,120	35,640	76,860	77,960	20.5%	778,420.00
0.3	(126,000)	Plus Lease Amount After Term Period 22 Years	47,940	48,750	49,530	50,310	51,090	51,900	52,680	113,580	115,290	116,940	20.6%	1,227,750.00
0.4	(168,000)	Plus Lease Amount After Term Period 21 Years	63,920	65,000	66,040	67,080	68,120	69,200	149,280	151,440	153,720	155,920	20.7%	1,716,040.00
0.5	(210,000)	Plus Lease Amount After Term Period 20 Years	79,900	81,250	82,550	83,850	85,150	183,750	186,600	189,300	192,150	194,900	20.8%	2,242,300.00
0.6	(252,000)	Plus Lease Amount After Term Period 19 Years	95,880	97,500	99,060	100,620	217,140	220,500	223,920	227,160	230,580	233,880	21.0%	2,805,720.00
0.7	(294,000)	Plus Lease Amount After Term Period 18 Years	111,860	113,750	115,570	249,410	253,330	257,250	261,240	265,020	269,010	272,860	21.1%	3,405,360.00
0.8	(336,000)	Plus Lease Amount After Term Period 17 Years	127,840	130,000	280,640	285,040	289,520	294,000	298,560	302,880	307,440	311,840	21.3%	4,040,400.00
0.9	(378,000)	Plus Lease Amount After Term Period 16 Years	143,820	310,770	315,720	320,670	325,710	330,750	335,880	340,740	345,870	350,820	21.5%	4,709,970.00
1.0	(420,000)	Plus Lease Amount After Term Period 15 Years	339,700	345,300	350,800	356,300	361,900	367,500	373,200	378,600	384,300	389,800	21.8%	5,413,200.00

Note:

Forecast Revenues were estimated based on existing farm cost/returns. The forecast calculations are not guarantees of performance.