

FINANCIAL VALUE ANALYSIS OF THE ROSE GARDEN PROJECT.

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ABSTRACT

This research studied the financial return of Rose Garden Project. The objective is to study the investment return by comparing with return between buying rose flower from Pak Klong Tarad in Bangkok and creating rose garden then let other people to take care (contract farming is the company has to advance all expenses excepted the labor, transportation, facilities and price of rose guarantee at 0.2 Baht per flower). Population and sampling group is the location where is created a rose garden at Lao-Kwan District, Kanchanaburi Province on the area at 10 rais and in the part of financial return analysis process of rose garden projects are 1. Find all profit and expenses of buying rose flower from Pak Klong Tarad 2. Find all profit and expenses in case of creating rose garden and let other people to take care 3. Compare financial return by using 4. Indicators such as Net Present Value (NPV), Benefit-Cost Ratio (B/C Ratio), Payback Period (PBP) and Internal Rate of Return (IRR). Research result found that in case of creating rose flower had NPV = 534,142 Baht, B/C = 3.14, PBP = 1.7 years, and IRR = 36% at the same time the feasibility of buying rose flower from Pak Klong Tarad get NPV=170,248 baht, B/C = 1.32, PBP = 1.1 and IRR=18.5% which means creating rose garden get higher financial return than buying rose flower from Pak Klong Tarad

Key word: Financial return, NPV, B/C, PBP, IRR.

INTRODUCTION

In case company study at Huaiphu sub-district, Nakhon Chai Si District, Nakhon Pathom Province is an orchid export company which are the rose and both from flowers and decorative products to cross countries i.e. China, Malaysia, Singapore, India, Japan etc. Now, the demand from foreign countries is higher causes the company cannot produce enough to meet those requirements; therefore, the company is necessary to pick up from other gardens and must pick up flowers from various gardens by weekly then keep in cold room and obtain by shipping boxes to foreign countries to be completed within 24 hours when delivery to destination, the flowers are not fresh and have many problems

Many times the company faced the problem about the flower shortage or too high price caused many factors i.e. the demand from aboard increased, flower gardens are faced little flower etc. The owner company has the idea to build the rose garden in Karnchanaburi Province therefore researcher is interested in to study the financial worth of creating rose garden project

OBJECTIVE

To analyze the financial worth of project

METHODOLOGY

Determination of population and sampling groups

1. Population is number of location where is studied a total of 1 location
2. Sampling group is number of location where is studied a total of 1 location

Data collection

1. Number of car, customer, delivery term and condition etc. will be used the secondary data of company
2. Data about the nature of problem, special delivery term, delivery process etc. will be used interviewing employee work to need more information in term of secondary data does not exist
3. Data about the creating rose garden will be used in interviewing employee of company, rose garden farmer group, and vendors at Pak Klong Talad group

Operation process

1. To study data of location at Lao Kwan District, Karnchanaburi Province
2. To study the detail of doing rose garden
3. To study the expense of creating rose garden process
4. To study the flowering rate of rose
5. To study net profit in case of purchasing roses in bloom at Pak Klong Talad
6. To study net profit in case of purchasing roses in bloom at rose garden
7. To calculate NPV, B/C and IRR

RESULTS

1. Study result of data in location at Lao Kwan, Karnchanaburi Province

From interview executive level of company found that

1. At Lao-Kwan District, Karnchanaburi Province is suitable for planting rose flower due to it is next to the mountain, good soil and cool weather cause the rose flower look like big flower

2. There are the farmer in Lao-Kwan, Karnchanaburi Province at one farmer need to apply to be contract farming of company means that company purchases all of products by guarantee at a price of 0.2 baht per flower and advance the operation cost such as seedling cost, cable system fee, water supply system cost, fertilizer cost and other cost except labor cost

3. Area where is the creating rose garden in Lao-Kwan, Karnchanaburi Province on the area of 10 rais where is the farmer owner who apply to contract farming of company

2. Study result of detail about doing rose garden

From collecting data from rose garden farmer group found that

1. Area of 1 rai requires 1300 rose seedlings
2. Able to cut the first generation of rose flowers after 4 months
3. Roses flowering rate after 4 months will be increased and decreased after one year and will be plant the new roses seedling when get the flower for 2 years
4. Customer is interested in rose bloom only

3. Study result about the cost of creating rose garden process

Doing roses garden in area of 10 rais has many processes 4 stages shown on table 1

Table 1
Cost of creating rose garden process

Activities	Lamp sum expense (Baht)
1. Lifting groove	5,000
2. Make a power system (distance 3 kilometer)	160,000
3. Make water system (distance 3 kilometer)	50,000
4. Plant rose seedlings (13,500 branches*5 baht)	67,500
5. Fertilizer formula 16-16-16 (4 sacks*1200 baht*4months)	19,200
Total	301,700

4. Study result of roses flowering rate

After planting rose seedlings after 4 months, the roses is growing the first generation and new seedling will be planted after getting flower for 24 months. Details shown on table 2

Table 2
Flowering rate of Rose

Month	Flowering Rate	Number of seedling (Branches)	Rose Flower per day (flower)	Number of day	Rose flower per month (flower)
1	0.9	13,000	11,700	31	362,700
2	1	13,000	13,000	28	364,000
3	1.1	13,000	14,300	31	443,300
4	1.2	13,000	15,600	30	468,000
5	1.3	13,000	16,900	31	523,900
6	1.4	13,000	18,200	30	546,000
7	1.5	13,000	19,500	31	604,500
8	1.6	13,000	20,800	31	644,800
9	1.7	13,000	22,100	30	663,000
10	1.8	13,000	23,400	31	725,400
11	1.9	13,000	24,700	30	741,000
12	2	13,000	26,000	31	806,000
13	2	13,000	26,000	31	806,000
14	1.9	13,000	24,700	28	691,600
15	1.8	13,000	23,400	31	725,400
16	1.7	13,000	22,100	30	663,000
17	1.6	13,000	20,800	31	644,800
18	1.5	13,000	19,500	30	585,000
19	1.4	13,000	18,200	31	564,200
20	1.3	13,000	16,900	31	523,900
21	1.2	13,000	15,600	30	468,000
22	1.1	13,000	14,300	31	443,300
23	1	13,000	13,000	30	390,000
24	0.9	13,000	11,700	31	362,700

5. Study result of net profit in case of purchasing roses flower in bloom at Pak Klong Tarad

Researcher collected expense data which purchased roses flower in bloom at Pak Klong Tarad shown detail on table 3

Table 3
Net Profit in case of purchasing rose flower in bloom at Pak Klong Tarad

Month	Fuel cost (Baht)	Requirement rose flower (flower)	Buy price (baht per flower)	Sell price (baht per flower)	Net Profit (baht)
1	6,200	362,700	0.60	0.65	11,935
2	5,600	364,000	0.30	0.40	30,800
3	6,200	443,300	0.40	0.50	38,130
4	6,000	468,000	0.60	0.65	17,400
5	6,200	523,900	0.60	0.65	19,995
6	6,000	546,000	0.30	0.40	48,600
7	6,200	604,500	0.10	0.30	114,700
8	6,200	644,800	0.50	0.55	26,040
9	6,000	663,000	0.40	0.50	60,300
10	6,200	725,400	0.30	0.40	66,340
11	6,000	741,000	0.30	0.40	68,100
12	6,200	806,000	0.60	0.65	34,100
13	6,200	806,000	0.60	0.65	34,100
14	5,600	691,600	0.30	0.40	63,560
15	6,200	725,400	0.40	0.50	66,340
16	6,000	663,000	0.60	0.65	27,150
17	6,200	644,800	0.60	0.65	26,040
18	6,000	585,000	0.30	0.40	52,500
19	6,200	564,200	0.10	0.30	106,640
20	6,200	523,900	0.50	0.55	19,995
21	6,000	468,000	0.40	0.50	40,800
22	6,200	443,300	0.30	0.40	38,130
23	6,000	390,000	0.30	0.40	33,000
24	6,200	362,700	0.60	0.65	11,935

6. Study result of net profit in case of purchasing rose flower in bloom from rose garden

Researcher collected expense data which were purchased rose flower in bloom from rose garden shown detail on table 4

Table 4
Net Profit in case of purchasing rose flower in bloom from rose garden

Month	Fuel cost (Baht)	Requirement rose flower (flower)	Buy price (baht per flower)	Sell price (baht per flower)	Net Profit (baht)
1	37,200	362,700	0.20	0.65	126,015
2	33,600	364,000	0.20	0.40	39,200
3	37,200	443,300	0.20	0.50	95,790
4	36,000	468,000	0.20	0.65	174,600

Month	Fuel cost (Baht)	Requirement rose flower (flower)	Buy price (baht per flower)	Sell price (baht per flower)	Net Profit (baht)
5	37,200	523,900	0.20	0.65	198,555
6	36,000	546,000	0.20	0.40	73,200
7	37,200	604,500	0.20	0.30	23,250
8	37,200	644,800	0.20	0.55	188,480
9	36,000	663,000	0.20	0.50	162,900
10	37,200	725,400	0.20	0.40	107,880
11	36,000	741,000	0.20	0.40	112,200
12	37,200	806,000	0.20	0.65	325,500
13	37,200	806,000	0.20	0.65	325,500
14	33,600	691,600	0.20	0.40	104,720
15	37,200	725,400	0.20	0.50	180,420
16	36,000	663,000	0.20	0.65	262,350
17	37,200	644,800	0.20	0.65	252,960
18	36,000	585,000	0.20	0.40	81,000
19	37,200	564,200	0.20	0.30	19,220
20	37,200	523,900	0.20	0.55	146,165
21	36,000	468,000	0.20	0.50	104,400
22	37,200	443,300	0.20	0.40	51,460
23	36,000	390,000	0.20	0.40	42,000
24	37,200	362,700	0.20	0.65	126,015

7. Calculation results of NPV, B/C and IRR

From above data were calculated to find NPV, B/C and IRR of 2 cases using excel shown detail on table 5

Table 5
Calculation of NPV, B/C and IRR of 2 cases

Year	Net Cash Flow at Pak Klong Tarad	Year	Net Cash Flow at Rose Garden
0	-800000**	0	-1,101,700***
1	536,440	1	1,627,570
2	520,190	2	1,696,210
NPV = 155,699.9 B/C = 1.19 IRR = 20.9%		NPV = 1,900,929 B/C = 2.73 IRR = 118.3%	

*Interest rate is used as MLR (Minimum Loan Rate) approximate 7%

** is 4 wheels car

*** is 4 wheels car price up to 301,700

CONCLUSION AND FUTURE WORK

From table 5 found that

1. NPV of creating rose garden is 1,900,929 Baht and NPV of purchasing rose flower from Pak Klong is 155,699.9 Baht which means creating rose flower garden is more financial worth than purchasing roses flower from Pak Klong

2. B/C of creating rose garden is 2.73 and B/C of purchasing roses flower from Pak Klong is 1.19 which means creating rose garden is more financial worth than purchasing roses flower from Pak Klong

3. IRR of creating rose garden is 118.3% and IRR of purchasing roses flower from Pak Klong is 20.9% which means creating rose garden is more financial worth than purchasing roses flower from Pak Klong

Objective of this research is to analyze the financial worth of project and from above data found that indicators as NPV, B/C and IRR results which aligned with the same direction as the creating rose garden has more the financial worth than purchasing rose flower from Pak Klong

In term of suggestion, this research analyzed the probability from financial worth only but in the truth might analyze various dimension i.e. geographic for example whether that area is affected by earthquake or not, whether that area at risk is affected by flooding or not etc. In term of geographic i.e. whether the rose garden create employment in the area or not etc. Environment i.e. dose the use of chemical affect the well-being of population in that area etc.

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