PROJECT REPORT ON

LEGUMES CULTIVATION

SUBMITTED BY

Promoter Name:
xxxxxxxxxxxxxxx

Project Location:
xxxxxxxxxxxxxxxxxxx

Prepared by

DownloadProjectReport.com
1187/67, Gruhalaxmi, J.M.Road,
Pune-400005

C O N T E N T S

CHAPTER NO.	PARTICULARS
I.	ABOUT THE PROMOTER
II.	PROJECT DESCRIPTION
III.	ECONOMICS OF THE PROJECT
	A. Basis & Presumptions
	B. Poject Profile
	C. Total Cost of Project
	D. Means of Finance
	E. Projected Profitability
	F. Financial Analysis
	G. Term Loan Repayment

CHAPTER - I

ABOUT THE PROMOTER

PARTICULARS	ABOUT THE PROMOTER
1. Name	: xxxxxxxxxxxx
2. Address	: xxxxxxxxxxxx
3. Aadhar No	: xxxxxxxxxxxx
4. Date of Birth	:xxxxxxxxxxxxx
5. PAN	: xxxxxxxxxxxxx
6. Constitution	: xxxxxxxxxxxxx
7. Experience	: xxxxxxxxxxxx

PROJECT DESCRIPTION

Introduction

Legumes are a family of low-maintenance plants that make the perfect addition to any home vegetable garden. In addition to their high nutritional value, legume plants promote nitrogen production, which enriches the soil. Most legumes are relatively easy to care for, making them ideal food crops for amateur home gardeners.

The legume family (also known as Leguminosae or Fabaceae) includes a large and diverse group of edible plants that are primarily used as food and cover crops

Plant species within the legume plant family include grain legumes like:

- Peanuts (*Arachis hypogaea*)
- Peas (*Pisum sativum*)
- Common beans (*Phaseolus vulgaris*)
- Cowpeas (*Vigna unguiculata*)
- Broad beans (*Vicia faba*)
- Chickpeas (*Cicer arietinum*)
- Soybeans (*Glycine max*).

Grain legumes have very high nutritional value and are a great source of protein and fatty acids.In addition to growing beans for human consumption, farmers plant legume species to enrich soil with nitrogen during crop rotation. Some species of vetch legumes, specifically hairy vetch and milkvetch, are an effective form of erosion control.

How Do Legumes Fix Nitrogen in the Soil?

Legumes have evolved in symbiosis with nitrogen-fixing bacteria called rhizobia that live on their root nodules and possess the almost miraculous ability to convert atmospheric nitrogen into a soluble form that roots readily absorb. This is known as nitrogen fixation.

Nitrogen is the element responsible for lush green growth in plants, but it is in short supply in most soils, which is why farmers and gardeners often add manure, inoculants, or synthetic fertilizers. Beans and peas add nitrogen to the soil, replacing the nutrients consumed by harvested non-legume crops. Beans and other nitrogen-fixing cover crops are sometimes referred to as “green manure” because they enrich the soil around them even after they have withered or been uprooted. Cover crops like legumes are essential for restoring degraded soils.

Common Types of Legumes

The legume family is incredibly diverse and includes plants that vary in appearance, taste, and growth cycle. Many legumes produce a dry fruit that serves as food for humans or livestock, including alfalfa, buckwheat, carob, tamarind, and lentils. Some of the most common types of legumes include:

1. **Peas**: Common peas include garden peas, green peas, cowpeas, chickpeas (garbanzo beans), pigeon peas, and black-eyed peas.
2. **Beans**: The abundance of common beans in the legume family include: adzuki beans, mung beans, lupine beans, black beans, green beans, kidney beans, lima beans, fava beans, and broad beans.
3. **Clover**: Red clover, white clover, sweet clover are common cover crops.

How to Grow Legumes: 8 Tips for Growing Beans and Peas

Legumes grow vigorously with minimal effort. Most legumes are hardy, durable crops that are easy to maintain and harvest. Here are some general tips for growing legumes:

1. **Make sure legumes are suited to your climate**. Different species of legumes vary in terms of their ideal temperature range. Peas do well when planted in late spring and will stop growing in the summer months. Green beans, on the other hand, can tolerate a large temperature range and will grow when the air temperature is anywhere between 65 and 85°F.
2. **Plant legume seeds the right distance apart**. Most legume seeds (including bean seeds) thrive when planted between six and 12 inches apart from each other. Some legumes, like lima beans and peas, can grow on trellises.
3. **Grow legume crops in direct sunlight**. Legume plants do best in unshaded areas, arranged so that they don’t block each other from receiving sunlight.
4. **Keep the soil moist**. Most plants in the legume family do well in moderately moist soil with average soil fertility. Adding mulch or organic matter can help preserve soil moisture and keep soil temperature down for peas and green beans.
5. **Water your legumes consistently**. Legumes do well with a consistent amount of watering, especially as temperatures rise. Green beans require one to two inches of water per week and do well with in-ground irrigation systems, as opposed to hand watering from above. Peas don’t mature in waterlogged soil, but pea seeds should be soaked in water prior to planting.

6. **Fertilize sparsely**. Most legumes do not need extra fertilizer added to the soil. Some legumes with longer growing seasons, like lima beans, benefit from soil amendments and extra manure added midway through their life cycle.
7. **Control pests**. Common garden pests like aphids and beetles often prey upon legumes. Some of these pests can spread plant diseases that ravage your crops if you don't catch them early enough. It's important to proactively inspect your plants to look for signs of pests. Choose the right method to fight infestation.
8. **Harvest at the correct time**. There's a wide range of season lengths for different types of legumes. Keep a watchful eye on your crops to look for sprouting, and be sensitive to sudden temperature changes that might affect the health and maturation of your legume plants. If you plan to eat your beans or peas fresh, pick them when the pods are still tender. Otherwise, allow the pods to mature, and harvest them when they're dry.

CHAPTER- III

ECONOMICS OF THE PROJECT

A. BASIS & PRESUMPTIONS

1 Payback period 5 years plus moratorium for the 3 year.

2 Tax on income ignored.

3 Promoters share includes self-contribution plus loan from friends and relatives.

4 There is no change in Government policies and interest rates in next 8 years.

B. PROJECT PROFILE (Financial)

Sr. No.	PARAMETERS	VALUE
1	Crop of Variety	Tur, Mug, Channa, Soyabean etc
2	Area in acre	3 Acres
3	Product	
4	Cost of the project(Rs.)	10,00,000
5	Bank loan (Rs.)	7,50,000
6	Own Contribution(Rs.)	2,50,000
7	Financial Indicators	
	BC R	1.29 :1
	N P W 15% (Rs.)	6,34,857
	I R R %	45.46
	Average DSCR	2.4
8	Interest Rate (% per annum)	12
9	Repayment	5 years plus moratorium for the 3 year

C. TOTAL COST OF PROJECT

SR. NO.	PARTICULAR	UNIT	UNIT RATE(Rs.)	QUANTITY	AMOUNT(Rs.)
1	**Land Development**				
i)	Land levelling & layout	Acre	20,000	3	60,000
ii)	Raised beds and fertile soil (2ft bed	Acre	20,000	3	60,000
iv)	Trench work	Acre	18,000	3	54,000
v)	Fencing & Gate	MTRS	10,000	3	30,000
vi)	Farm Road	MTRS	15,000	3	45,000
	SUB TOTAL – 1				**2,49,000**
2	**Irrigation**				
i)	Irrigation Cost of Open/Tube well,	No	80,000	1	80,000
ii)	Cost of Farm Pond	No	1,00,000	1	1,00,000
iii)	Cost of Farm Pipline (110mm/4kg)	Mtrs	18,000	3	54,000
	SUB TOTAL – 2				**2,34,000**
3	**Micro Irrigation**				
	Drip Irrigation	Acre	25,000	3	75,000
	Sub Total-3				**75,000**
4	**Cost of Cultivation**				
a.	Cost of Planting Material				
i)	Planting Material	Ls.			2,00,000
b.	Initial cost of inputs				
ii)	Fertilizer and Manure	Acre	15,500	3	46,500
iii)	Insecticide and Pesticide	Acre	15,500	3	46,500
iv)	Labour Charges	Acre	15,000	3	45,000
	SUB TOTAL – 4				**3,38,000**
5	**Mechanization**				
i)	Cost of Sprayer & other farm equipments	Ls			50,000
ii)	Farming Equipment	Ls			54,000
	SUB TOTAL – 6				**1,04,000**
	TOTAL				**10,00,000**

D. MEANS OF FINANCE

Sr. No.	Particular	Unit	Quantity	Amount in Rs.
1	Term loan	%	75	7,50,000
2	Own contribution	%	25	2,50,000
			TOTAL	**10,00,000**

E. PROJECTED PROFITABILITY

Sr. No	Particular	Unit	Unit rate in Rs.	Quantity	I year	II year	III year	IV year	V- year
I	**Income**								
	Production Capacity	%			50	60	70	80	90
a.	Sales of Crops (Tur, Mug, Channa, Soyabean etc.)	Acre	3,50,000	3.00	5,25,000	6,30,000	7,35,000	8,40,000	9,45,000
b.	Income from Intercropping	acre	35,000	3.00	1,05,000	1,05,000	1,05,000	1,05,000	1,05,000
				TOTAL	**6,30,000**	**7,35,000**	**8,40,000**	**9,45,000**	**10,50,000**
II	**Expenditure**								
a.	Planting Material	Ls			2,00,000	2,00,000	2,00,000	2,00,000	2,00,000
b.	Mannures & Fertilisers	acre	15,500	3.00	46,500	46,500	46,500	46,500	46,500
c.	Insectisides & Pesticides	acre	15,500	3.00	46,500	46,500	46,500	46,500	46,500
d.	Manpower (For land preparation, planting, Inter -	acre	15,000	3.00	45,000	45,000	45,000	45,000	45,000
e.	Intercropping cost	acre	15,000	3.00	45,000	45,000	45,000	45,000	45,000
				TOTAL	**3,83,000**	**3,83,000**	**3,83,000**	**3,83,000**	**3,83,000**
	Net Income			**TOTAL**	**2,47,000**	**3,52,000**	**4,57,000**	**5,62,000**	**6,67,000**

F. Financial Analysis

Particulars	I year	II year	III year	IV year	V- year
Capital Costs	10,00,000				
Recurring cost	3,83,000	3,83,000	3,83,000	3,83,000	3,83,000
Total Cost	**13,83,000**	**3,83,000**	**3,83,000**	**3,83,000**	**3,83,000**
Benefit	6,30,000	7,35,000	8,40,000	9,45,000	10,50,000
Depreciated value of buildings, fencing etc. @ 10%					35,130
Depreciated value of Machinery & equipments @ 15%					78,844
Closing stock value					20,000
Total Benefit	**6,30,000**	**7,35,000**	**8,40,000**	**9,45,000**	**11,83,974**
Net Benefit	**-7,53,000**	**3,52,000**	**4,57,000**	**5,62,000**	**8,00,974**
Discounting Factor@ 15%	0.87	0.76	0.66	0.57	0.50
NPV cost at 15% DF	12,03,210	2,91,080	2,52,780	2,18,310	1,91,500
NPV benefits at 15% DF	5,48,100	5,58,600	5,54,400	5,38,650	5,91,987
NPW at 15% DF	**6,34,857**				
BCR at 15% DF	**1.29 :1**				
IRR %	**45.46**				

G. Term Loan Repayment

Rate of interst - % per annum **:** 12.0

Opening balance of term loan **:** 7,50,000

Year	Loan Outstanding	Net Income	Principal	Interest	Total Repayment	Net Surplus	DSCR
1	7,50,000	2,47,000	150000	90000	240000	7,000	1.0
2	6,00,000	3,52,000	150000	72000	222000	1,30,000	1.6
3	4,50,000	4,57,000	150000	54000	204000	2,53,000	2.2
4	3,00,000	5,62,000	150000	36000	186000	3,76,000	3.0
5	1,50,000	6,67,000	150000	18000	168000	4,99,000	4.0
						Avg. DSCR	**2.4**