

DETAILED PROJECT REPORT ON INTEGRATED AGRICULTURE PROJECT



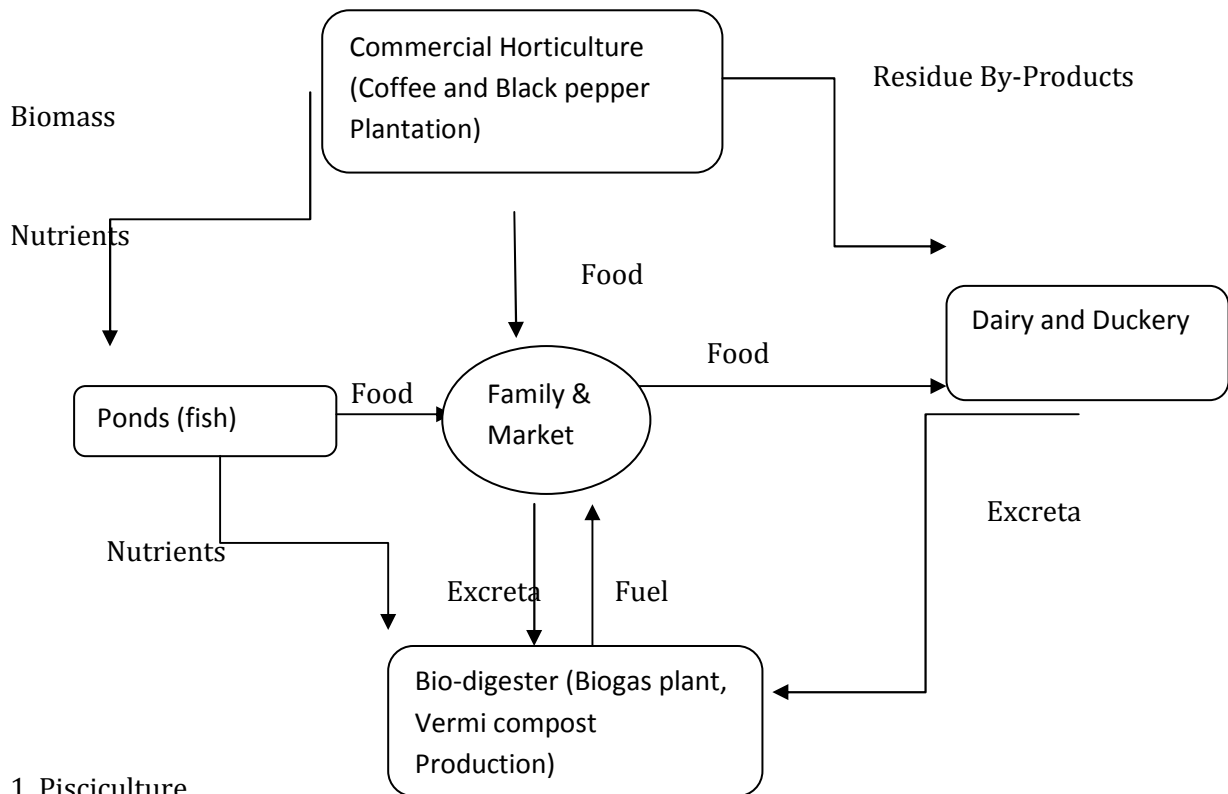
INTRODUCTION

1. CONCEPT

Integrated farming is a whole farm management system which emphasizes on a holistic management approach looking at the whole farm as cross linked unit, on the fundamental role of function of agro-ecosystems, on nutrient cycles which are balanced and adopted to the demand of the crops and on health and welfare of the livestock of the farm. Preserving and enhancing soil fertility maintaining and improving a diverse environment and adherence to ethical and social criteria are indispensable basic elements of the proposed project. Crop protection takes into account all biological, technical and chemical methods which then are balanced carefully and with the objective to protect the environment to maintain profitability of the business and to fulfil social requirements

2. PROJECT COMPONENTS

The following diagram depicts different components of the proposed commercial agri-enterprise



1. Pisciculture
2. Duckery
3. Dairy
4. Black pepper
5. Coffee
6. Vermi compost production
7. Biogas production

PROJECT COMPONENT DETAILS

3.1 PISCICULTURE

There are 2 existing ponds of 5.0 Ac and 4.0 Ac. Both the ponds will be innovated for intensive pisciculture and sluice a gate with retention wall will be built for controlling water level. Besides, one new pond of 0.3 Ac will be excavated for fingerling production. The renovation cost of existing fish pond, construction cost of sluice gate along with retention wall in addition to cost of digging one new pond have been included while estimating the investment requirement of the pisciculture component of the proposed enterprise. **(Estimate – Annexure I)**

3.2 DUCKERY

The duckery unit is complimentary to pisciculture apart from being an economic activity. The litters from duckery will be effectively utilised by the fish as feed and ducks swimming in the pond will help in oxygenation of the water leading to enhanced oxygen supply to the fish. In the proposed project, a duckery unit of 1000 + 150 birds has been included in the project cost estimate. Though the ponds inside the farm of the enterprise will be mostly used by the ducks, provision of night shelter has been made in the project. **(Estimate – Annexure II)**

3.3 DAIRY FARMING

The proposed project will have a dairy unit with 20 Cross breed cows. The cow dung will be used in the bio-gas plant as well as the vermin-compost unit. For construction of the dairy shed, 100 dec. land has been earmarked. Besides fodder cultivation, subabul will be planted as a border crop along side of the barbed wire fencing in the boundaries. **(Estimate – Annexure III)**

3.4. COMMERCIAL HORTICULTURE

Black pepper cultivation and Coffee production as intercrop are included in the project. **(Estimate - Annexure IV(a) and Annexure IV(b))**

3.5. VERMI-COMPOST PRODUCTION

A vermin-compost unit has been included as a component of the enterprise. The output (Vermi-compost and Vermiwash) of the unit will be used in own farm and the surplus will be sold to other farmers in nearby locality. 6 tanks of size 15m X 15m will be constructed for production of vermi-compost. **(Estimate – Annexure V)**

3.6. LAND USE PLAN

The land use plan/site layout plan is given in Table 3.1.

Table 3.1: Land Use Plan

Sl No	Items	Proposed Use (Ac.)
1	Fish Pond	0.5
2	Dairy	5.0
3	Duckery	0.5
4	Vermi Compost	0.5
5	Coffee – Inter crop	
6	Black pepper – Commercial Horticulture	10
	Total Area	16.5

The vacant area of 3.5 Acres is left for roads/pathways, security room, Store cum pack house, overhead tanks, Biogas Plant and fodder cultivation.

3.7. DRIP IRRIGATION SYSTEM

For increased water efficiency, drip irrigation systems with borewells and overhead tanks have been proposed for all horticulture plantations including the inter-crop.

3.8. FARM MACHINERIES

Farm Machineries such as power-tillers and accessories, pump-set, transport vehicle, aerators, Khoa making machine and cream separator have been proposed to facilitate cultivation, inter-culture, transportation, value addition etc.

3.9. BARBED WIRE FENCING WITH SUBABUL AS BOARDER PLANTATION

Provisions for the barbed wire fencing have been made for protecting the farm/ crops from stray cattle / trespassers / encroachers. Subabul plants will be planted alongside of the barbed wire fencing for long term fencing solution besides serving the purpose of fodder for the dairy animals. Besides chillor will be planted all along the fence as long term green fencing solution.

FINANCIAL ANALYSIS

4.1 PROJECT COST

Sl	Item	Unit	Amount (Rs. In Lakh)
A.	General		
1	Power tiller with accessories	1 No	1.80
2	5 HP Pump set	1 No	0.35
3	Renovation of the existing dilapidated structures to be used as stores watch & ward room and workers shed - LS	1 No	4.50
4	Bore well @ 1.5 lakhs	2 No	3.00
5	Overhead water tank (8'x8'x8' and 20'x20'x20') with platform/pillar with Drip/Sprinkler systems for irrigation.	2 No	6.00
6	Solar wire Fencing @ Rs. 125 ft		5.66
7	Surveillance System		1.40
8	TATA Ace (Vehicle)		1.28
9	Khoa Machine & Cream Separator		0.95
10	Pack-house cum Processing hall 600sqft @ 1200sqft		6.12
11	Electrical installation		1.50
12	Fishery equipment including aerators		1.10
13	Cost of Chaff cutter and equipment		1.40
		Sub-total	35.06
B.	Pisciculture Unit		
1	Capital cost		1.95
2	Recurring cost for 1st year		2.25
		Sub-total	4.20
C.	Vermi Compost Unit		
1	Capital cost		3.68
2	Recurring cost for 1st year		1.17

		Sub-total	4.85
D.	Dairy		
1	Capital cost		17.25
2	Recurring cost for 1st year		7.99
		Sub-total	25.24
E.	Coffee		
1	Capital cost		-
2	Recurring cost for 1st year		5.88
		Sub-total	5.88
F.	Black pepper		
1	Capital cost		-
2	Recurring cost for 1st year		5.20
		Sub-total	5.20
G.	Bio gas Plant - 8 Cum		
1	Capital cost		2.00
2	Recurring cost for 1st year		0.50
		Sub-total	2.50
H.	Duckery		
1	Capital cost		10.22
2	Recurring cost for 1st year		1.35
		Sub-total	11.57
		G-Total	94.50

4.2 COST OF PROJECT AND MEANS OF FINANCE

4.2.1 Cost of Project

Sl	Components	Rs. (in lakhs)
1	Fixed Cost	94.50
2	Pre-operative expenditure	
	a. Interest in moratorium (3.00 lakhs)	
	b. Consultancy Charges (0.5 lakhs)	3.5
	TOTAL	98.00

4.2.2 Means of Finance

Sl	Components	Rs. (in lakhs)
1	Promoter's Contribution	46
2	Bank Loan	52
	TOTAL	98

4.3 Depreciation

Sl	Description	Production related Machines	Electrical & Others	Civil Structures	Total Depreciation
1	Applicable depreciation rate	15%	10%	5%	
2	Cost of the asset (As on 30.06.2017)	24.11	4.60	43.60	
3	Depreciation for Fy 2017-18	3.62	0.69	6.54	10.85
4	WDV as on 31.03.2018	20.49	3.91	37.06	
5	Depreciation for Fy 2018-19	3.07	0.59	5.56	9.22
6	WDV as on 31.03.2019	17.42	3.32	31.50	
7	Depreciation for Fy 2019-20	2.61	0.50	4.73	7.84
8	WDV as on 31.03.2020	14.81	2.82	26.78	
9	Depreciation for Fy 2020-21	2.22	0.42	4.02	6.66
10	WDV as on 31.03.2021	12.59	2.40	22.76	
11	Depreciation for Fy 2021-22	1.89	0.36	3.41	5.66
12	WDV as on 31.03.2022	10.70	2.04	19.35	
13	Depreciation for Fy 2022-23	1.60	0.31	2.90	4.81
14	WDV as on 31.03.2023	9.09	1.73	16.44	
15	Depreciation for Fy 2023-24	1.36	0.26	2.47	4.09
16	WDV as on 31.03.2024	7.73	1.47	13.98	

4.4 CALCULATION OF IRR & BC RATIO

4.4.1 Assumptions

- 1 Term loan to be repaid in 7 years
- 2 Interest to be charged at 10% per annum
- 3 Installment and repayment to be serviced from 1st year from exiting income.

4.4.2 Income

Particulars	2018	2019	2020	2021	2022	2023	2024
<i>Vermicompost</i>	1.37	2.73	2.73	2.73	2.73	2.73	2.73
<i>Pisci culture</i>	20.00	20.00	20.00	20.00	20.00	20.00	20.00
<i>Duckery</i>	6.56	8.20	8.20	8.20	8.20	8.20	8.20
<i>Dairy</i>	12.85	15.35	15.35	15.36	20.57	20.57	20.57
<i>Coffee</i>	-	-	-	-	5.60	6.80	7.20
<i>Blackpepper</i>	-	-	-	1.00	1.25	1.56	7.80
Total	40.78	46.28	46.28	47.29	58.35	59.86	66.50

4.4.3 Recurring expenses

Particulars	2018	2019	2020	2021	2022	2023	2024
<i>Vermicompost</i>	1.16	1.61	1.61	1.61	1.61	1.61	1.61
<i>Pisci culture</i>	2.25	2.25	2.25	2.25	2.25	2.25	2.25
<i>Duckery</i>	4.32	5.40	5.40	5.40	5.40	5.40	5.40
<i>Dairy</i>	7.99	9.51	9.51	9.75	9.75	9.75	9.75
<i>Coffee</i>	5.88	5.88	5.88	5.88	5.88	5.88	5.88
<i>Blackpepper</i>	5.20	5.20	5.20	5.20	5.20	5.20	5.20
Total	26.80	29.85	29.85	30.09	30.09	30.09	30.09

4.4.4 Average Interest

Particulars	2018	2019	2020	2021	2022	2023	2024
<i>Loan Amount</i>	-	52	43	34	25	16	7
<i>Principal at the end of the year</i>	52	43	34	25	16	7	0
<i>Average Balance</i>	26	47.5	38.5	29.5	20.5	11.5	3.5
<i>Interest @ 9.5%</i>	2.47	4.51	3.66	2.80	1.95	1.09	0.33

4.4.5 Net-Income

Particulars	2018	2019	2020	2021	2022	2023	2024
<i>Income</i>	40.78	46.28	46.28	47.29	58.35	59.86	66.50

<i>Less Depreciation</i>	10.85	9.22	7.84	6.66	5.66	4.81	4.09
<i>Less Interest on Loan</i>	2.47	4.51	3.66	2.80	1.95	1.09	0.33
<i>Income after dep and Interest</i>	27.46	32.55	34.78	37.82	50.74	53.96	62.08
<i>Recurring Expense</i>	26.80	29.85	29.85	30.09	30.09	30.09	30.09
<i>Net Income</i>	0.66	2.70	4.93	7.73	20.65	23.87	31.99

4.4.6 **Surplus & NPV**

Particulars	2018	2019	2020	2021	2022	2023	2024	Sum
Net Income	0.66	2.70	4.93	7.73	20.65	23.87	31.99	
Depreciation	10.85	9.22	7.84	6.66	5.66	4.81	4.09	
Interest on Term Loan	2.47	4.51	3.66	2.80	1.95	1.09	0.33	
Surplus	13.98	16.43	16.43	17.20	28.26	29.77	36.41	
DF @ 6 %	0.94	0.89	0.84	0.79	0.75	0.70	0.67	
NPV	13.19	14.62	13.79	13.62	21.12	20.99	24.21	121.55
DF @ 15%	0.87	0.76	0.66	0.57	0.50	0.43	0.38	
NPV	12.16	12.42	10.80	9.83	14.05	12.87	13.69	85.83

4.4.7 **IRR**

Particulars	At 6 %	At 15 %
NPV	121.55	85.83
Initial Investment	98	98
Diff. (1-2)	23.55	12.17
IRR	11.93	

4.4.8 **BC Ratio**

Particulars	2018	2019	2020	2021	2022	2023	2024
Total Income	40.78	46.28	46.28	47.29	58.35	59.86	66.50
Total Expenses	26.80	29.85	29.85	30.09	30.09	30.09	30.09
DF @11.93 %	0.89	0.80	0.71	0.64	0.57	0.51	0.45
NPV income @ 11.93 %	36.43	36.94	33.00	30.13	33.21	30.44	30.21
NPV expenses @ 11.93 %	23.94	23.83	21.29	19.17	17.13	15.30	13.67
BC Ratio	1.52	1.55	1.55	1.57	1.94	1.99	2.21
Lending							

BC - Ratio
Lending Rate 11.50%

Since IRR is > than lending rate & BC ratio is more than 1, the project is viable.

4.4.9 **DSCR**

Particulars	2018	2019	2020	2021	2022	2023	2024
<i>Net Profit</i>	0.66	2.70	4.93	7.73	20.65	23.87	31.99
<i>Depreciation</i>	10.85	9.22	7.84	6.66	5.66	4.81	4.09
<i>Interest on TL</i>	2.47	4.51	3.66	2.80	1.95	1.09	0.33
<i>Total</i>	13.98	16.43	16.43	17.20	28.26	29.77	36.41
<i>Installment</i>	0	15	15	15	15	15	15
<i>Interest on TL</i>	2.47	4.51	3.66	2.80	1.95	1.09	0.33
<i>Total</i>	2.47	19.51	18.66	17.80	16.95	16.09	15.33
<i>DCSR</i>	5.66	0.84	0.88	0.97	1.67	1.85	2.37

2.03

Average DSCR

5.0 Administrative Expense

Sl No	Description	Nos.	Salary (Rs.)	
			Monthly	Annual
(A) Manpower Cost				
1	Farm Manager	3	10,000	360,000
2	Labourer (Skilled)	3	21,500	258,000
3	Labourer (Semi-Skilled)	3	18,000	216,000
	Total			834,000
(B) Other Administrative Expenses				
1	Telephone, Office Stationery, Electricity charge, Fuel Expenses, etc.		10,000	120,000
	Grand Total			954,000

NB: The administrative expenses have been factored in individual activities while taking the unit cost. However, the project will have to make the provision as per requirement.

6.0 Breakeven Analysis

Sl	Particulars	Projected						
		2018	2019	2020	2021	2022	2023	2024
A	Variable Expenses (Yearly)	26.80	29.85	29.85	30.09	30.09	30.09	30.09
B	Fixed Cost							
	Depreciation	10.85	9.22	7.84	6.66	5.66	4.81	4.09
	Interest on Loan	2.47	4.51	3.66	2.80	1.95	1.09	0.33
	Administrative Expenses	9.54	10.97	12.62	14.51	16.69	19.19	22.07
	Sub-total (B)	22.86	24.71	24.11	23.97	24.30	25.10	26.49
C	Revenue (Total Income)	40.78	46.28	46.28	47.29	58.35	59.86	66.50
D	Contribution (C-A)	13.98	16.43	16.43	17.20	28.26	29.77	36.41
E	P/V Ration (D/C) in %	34.28	35.50	35.50	36.37	48.43	49.73	54.75
F	BEP Sales (Rs. In lakhs) = Fix Cost/PVR*Cont (B/E*D)	9.32	11.43	11.16	11.34	14.18	15.02	17.62
G	Margin of Safety (C_F)/F*100	337	305	315	317	312	298	277

7.0 Capital Investment Subsidy

The proposed project is eligible for capital investment subsidy@ 50% of the capital cost (excluding cost of land) subject to a limit of 49.00 lakhs as applicable to Commercial Agri-Enterprise category under Agriculture Policy 2013. Hence, an amount of Rs. 49 lakhs is expected to be received by the enterprise on completion of the project.

NOTE :On the basis of the above analysis, the proposed project is found to be technically feasible and economically viable. The Capital Investment Subsidy under State Agriculture Policy 2013 of the State Government if released to which the project is entitled to, will be adjusted against term loan as and when received and thereby improve the economic viability of the enterprise further.

Area size 0.5 Ac

A. COST OF PRODUCTION OF PISCICULTURE

1. Land Cost (Own Land)
2. Civil Work

Particulars	Amount (in lakhs)
I A. Evacuation of the existing ponds	0.75
B. Sluice Gate and Retaining wall construction for maintaining water level	1.20
	1.95

2. Raw materials requirements per ha

Materials	Quantity (per ha)	For 0.5 acre	Rate/unit	Amount (Rs. Lakh)
1. Lime	2000 Kg	800 Kg	10	8,000
2. Fingerlings	5000Nos	2000 Nos	10	20,000
3. Organic Manure	10Mt	4 Mt	1000	4,000
4. Urea nd TP Fertilizer	250Kg	100 Kg	40	4,000
5. Mustard Cake	2700Kg	1080 Kg	12	12,960
6. Rice Bran	2700Kg	1080 Kg	5	5,400
Sub-total				54,360
Capital Cost				195,000
Working Cost				54,360
Total				249,360

B. PRODUCTION

1. Assuming 85% survival	20,000
2. With averageSize Wt 1 Kg	20,000
3. Farm Gate sale Price @ 100/- per Kg	200,000

C. COST

Item	Year 1	Year 2	Year 3	Year 4	Year 5
Fixed Cost	25.10				
Recurring Cost	2.25	2.25	2.25	2.25	2.25
Total Cost	27.35	2.25	2.25	2.25	2.25
Income from Sale	20.00	20.00	20.00	20.00	20.00

ESTIMATE OF DUCKERY

Annexure II

Shed for Duckery



- Length = 20 meters, Width = 8 meters and Height = 2.4 meters.
- Cement concrete flooring with gradual sloping towards pond.
- Stainless/GI wire netting wall 0.5 meter above floor with 2 feet X 3 feet out let (door) towards pond.
- This is for 1,000 ducks starting from brooding and laying for 2 years
- Wooden laying nests will be provided on both sides.

ESTIMATE ON DAIRY FARMING

Annexure III

Economics of Dairy Farming

A model project with 20 cross-breed cows is given below. This is indicative and the applicable input and output costs as also the parameters observed at the field level may be incorporated.

1. CAPITAL COST

Particulars	Cost (Rs.)
Cost of Animals	1,000,000
Transportation cost	20,000
Constructin of Animal Shed (1500 sqft)	450,000
Construction of Calf shed (400 sqft)	120,000
Isolation Box (150 sqft)	45,000
Heifer Shed (300 sqft)	90,000
Total	1,725,000

ESTIMATE ON DAIRY FARMING

2. TECHNO ECONOMIC PARAMETERS

Type of Animal	Graded Cow
No. Of Animals	20
No. Of Animals/batch	10
Cost of Animal (Rs./Animal)	50,000
Cost of Culled Animal	5,000
Transportation Cost of Animal	1,000
Average Milk Yield (Litre/day)	10
Floor space (q ft) per adult animal	50
Floor space (q ft) per calf	20
Floor space (q ft) per heifer	30
Cost of construction per sq ft (Rs.)	300
Cost of chaff cutter (power operated) (Rs.)	50,000
Cost of equipment per animal (Rs.)	1,000
Insurance premium (% per annum)	5
Veterinary aid/animal /year (Rs.)	1,000
Quantity of Concentrate feed in one bag (kg)	50

Cost of Concentrate feed (Rs./kg)	15
Cost of dry fodders (Rs./kg)	2
Cost of green fodders (Rs./kg)	1
No. of labourers	2
Salary per labourer per month (rs.0	7,500
Cost of electricity andd water/animal/year	150
Margin %	25
Rate of interest	12
Repayment period (years)	7
Selling price of milk/litre (Rs./litre)	26
Sale price of gunny bags (R. Per bag)	10
Lactation days	270
Dry days	150

3. FEEDING SCHEDULE

Type of Feed	Lactation			Dry	
	Price (Rs.)	Qty. (kg)	Cost per day (Rs.)	Qty. (kg)	Cost per day (Rs.)
Concentrated Feed	15	3	45	2	30
Dry Fodder	1	14	14	5	5
Green Fodder	2	3	6	4	8
			65		43

4. LACTATION CHART PER ANIMAL:

Year	Batch I		Batch II	
	Lactation days	Dry Days	Lactation days	Dry Days
1	240	30	90	-
2	240	120	210	150
3	210	150	240	120
4	210	150	270	90
5	210	150	270	90
6	210	150	270	90
7	210	150	270	90

5. TOTAL CONCENTRATE FEED CONSUMPTION

Year	Lactation	Dry	Total	No. Of Gunny Bags
1	33,000	1,200	34,200	684
2	45,000	10,800	55,800	1,116
3	45,000	10,800	55,800	1,116
4	48,000	9,600	57,600	1,152
5	48,000	9,600	57,600	1,152
6	48,000	9,600	57,600	1,152
7	48,000	9,600	57,600	1,152

6. ECONOMICS

Particulars	Years				
	1	2	3	4	5
Sale of Milk	1,278,000	1,524,000	1,524,000	1,524,000	2,045,000
Sale of Gunny bags	6,840	11,160	11,160	11,520	11,520
Total	1,284,840	1,535,160	1,535,160	1,535,520	2,056,520
Cost of feeding during lactation	371,000	473,300	473,300	520,700	520,700
Cost of feeding during dry period	179,000	228,500	228,500	205,700	205,700
Veterinary aid and breeding charges	25,000	25,000	25,000	25,000	25,000
Labour Charges	100,000	100,000	100,000	100,000	100,000
Electricity and Misc Charges	4,000	4,000	4,000	4,000	4,000
Insurance Charges	120,000	120,000	120,000	120,000	120,000
Total	799,000	950,800	950,800	975,400	975,400
Surplus	485,840	584,360	584,360	560,120	1,081,120

ESTIMATE ON BLACK PEPPER PLANTATION
Annexure IV (a)

A. INPUT COST

Particulars	Year 1	Year 2 onwards
Planting Materials	2.40	-
Cost of Manure	0.72	1.44
Fertilizer	0.65	0.77
Plant protection chemicals	0.63	1.02
Fencing	0.63	1.50
Miscellaneous	0.17	0.47
Total	5.20	5.20

B. INCOME (BENIFITS)

Particulars	Year 3	Year 4
Yield	190	222
Income per unit	525	564
Total Income	1	1.25

ESTIMATE ON COFFEE PLANTATION - INTERCROP
Annexure IV (b)

A. INPUT COST

Particulars	Year 1	Year 2 onwards
Planting Materials	2.50	-
Cost of Manure	0.80	1.35
Fertilizer	0.75	0.97
Plant protection chemicals	0.80	1.42
Fencing	0.88	1.60
Miscellaneous	0.15	0.54
Total	5.88	5.88

B. INCOME (BENIFITS)

Particulars	Year 5	Year 6
Yield	903	1,046
Income per unit	620	650
Total Income	5.6	6.8

ESTIMATE ON VERMI-COMPOST PRODUCTION

Annexure V

Sr	Particulars of item	Amount	
		Year 1	Year 2
A.	Land and Building	-----	-----
1.	Land(on lease)	-----	
2.	Levelling and earth filling for vermi-compost sheds	15,000	
3.	Fencing and gate	15,000	
4.	Open shed with brick lined bed bottom and platform with RCC/MS pipe post & truss and thatch/HDPE/ locally available roof (@1000/m) for:		
a.	Vermi-compost beds: (15 m* 1.5 m* 6nos = 135m ² + 20m ² pathways/utility =155m ²)	1,55,000	
b.	For finished products 10m ²	10,000	
	Subtotal (a)	1,95,000	
B.	Implements and machinery		
1.	Shovels, spades, crowbars, iron baskets ,dong fork, trowel, buckets, bamboo baskets,	5,000	
2.	Plumbing fitting tools	1,500	
3.	Power operated shredder	5,000	
4.	Sieving machine with three wire mesh sieves-0.6m x 0.9 m sizepower motor	10,000	
5.	Weighing scale(100kg capacity)	2,500	
6.	Weighing machine(platform type)	6,000	
7.	Bag sealing machine	5,000	
8.	Culture trays(plastics)(35cm x 45cm) 4 nos	1,600	
9.	Wheel barrows-2 nos	12,000	
	Sub total (B)	48,600	
C.	Water provision- Borewell with hand pump , pipe, dipper and electrical installations	1,00,000	
D.	Earthworms (@1kg per m ³ and 300/kg total utilized bed volume =81m ³)	25,000	
	Total Capital cost	3,68,600	

Total operational cost for one year with 7 cycles of 65-75 days

Bed volume 81m³ ; Recovery 30%

B. OPERATIONAL COST

Sr.	Particulars of Item	Amt (Rs.)	
		Year 1	Year 2 onwards
1	Agriculture wastes (cost, collection and transportation) @ 320kg per cubic meter and Rs. 200/MT (15*1.5*0.6*6*5*320*200/1000) [at 50% in 1st year]	12,960	25,920
2	Cow dung (cost, collection and transportation) @ 80kg per cubic meter and Rs. 250/MT (15*1.5*0.6*6*5*80*250/1000) [at 50% in 1st year]	4,050	8,100
3	Salary wages for 1 permanent skilled labourers @ Rs. 6000/month	72,000	72,000
4	Labour wages on day to day basis in formation of vermi-bed with agro-waste, cow dung and worms, watering, stirring, harvesting, sieving, packing, etc., including cost of bags (250 mds [@Rs. 200/md][at 50% in 1st year]	6,000	12,000
5	Electrical charges for pump, machinery, lighting, etc. [at 50% in 1st year]	9,000	18,000
6	Repair and maintenance [at 50% in 1st year]	7,500	15,000
7	Cost of bags and marketing cost [at 50% in 1st year]	5,000	10,000
	Total operational cost	116,510	161,020

B. COST AND BENEFITS

Sr	Cost	Amt (Rs.)	
		Year 1	Year 2 onwards
1	Total Capital Cost	368,600	-
2	Total Operational Cost	116,510	161,020
3	Total Cost	485,110	161,020
4	Benefit		
4a	Sale of Vermi-compost (50Mt @30% conversion) [Rs. 4500/MT at 60% in 1st year and 90% in 2nd year onwards	101,250	202,500
4b	Sale of worms [@5kg/MT of compost and @ Rs. 200/kg]	35,000	70,000
5	Net Benefit	348,860	111,480