

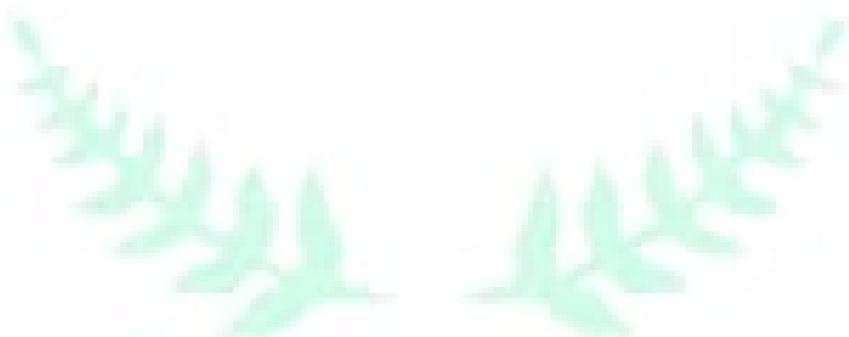


Detailed Project Report

on

Agro Service Center (Combine Harvester based)

Under MKUY



Name of the Entrepreneur/Entity:

Address:



Contents

1. Project Summary.....	2
2. Project Profile.....	3
2.1 Entrepreneur/EntityProfile.....	3
2.2. Project Consultant Details	4
2.3. Concept and Scope of the Project	Error! Bookmark not defined.
3. Techno-Commercial Assumptions.....	5
4. Financial Details.....	7
4.1. Project Fixed Capital.....	7
4.2. Project Variable Expenses	8
4.2. Details of Sales.....	8
4.3. Project Balance Sheet	10
4.4. Calculation of Depreciation.....	11
4.5. Projected P&L.....	11
4.6. Projected Cash Flow	12
4.7. Projected Loan Repayment.....	12
4.8. Calculation of DSCR, IRR and BEP	13
4.9. Summary of Project Cost.....	14



1. Project Summary

1	Name of the Enterprise (as per the Illustrative List of Enterprises)	Agro-service Center
2	Sector (as per the Illustrative List of Enterprises)	Agriculture
3	Project Capacity ¹	7 machines/equipment's
4	Project location (Village/Ward, Gram Pranchayat/Municipality, Block, District)	
5	Key components of the project (Example: Dairy, Vermicomposting, Biogas, Apiary, Solar Lighting)	Machineries, Equipment's, Services
6	Products/Output from the project	Rental machinery services
7	Total Project Cost	Rs.52,94,400
8	Fixed Capital Cost	Rs.52,38,400
9	Working/Recurring capital	Rs. 56,000
10	Bank Finance/ Self Finance	Bank
11	Bank Loan Amount	Rs.42,35,520
12	Promoter Contribution (min 10% in case of bank loan)	Rs.10,58,880
13	Bank details: Name of the Bank, Branch, IFSC Code	
14	Assumed Interest Rate of Interest	Under AIF (11-3) % = 8%
15	Subsidy Eligibility (40%, 50%)	
16	Repayment Terms (Tenure, Moratorium, Frequency, Mode of Repayment: equal principal/equal instalment)	Monthly equated instalments for 7 years
17	Key Financial Indicators: 1. Average Annual Net Profit 2. Debt Service Coverage Ratio (DSCR) 3. Internal Rate of Return Break Even Year	Rs. 17,85,822 2.51 34.15% 2 Years and 9 Months
18	Estimated employment to be generated (nos.)	4

Note: The price of the machinery / implements / equipment, custom hiring rate, bank interest etc quoted in the DPR is indicative. Final CIS will be calculated as per the laid down principles in the MKUY guideline.

¹ Capacity can be in terms of area or quantity



2. Project Profile

2.1 Entrepreneur/EntityProfile

1	Name of the Entrepreneur/Entity	
2	Legal status (Individual/ Group/ FPO/ FPC/ Proprietorship/ Partnership firm/ Company/ Cooperative/ Federation/ Society/ Trust)	
3	Name of Representative ² in Ease of entity	
4	Gender (Male/ Female/ Third Gender/ Not Applicable)	
5	Date of Birth of Individual/Representative of Entity	
6	Date of Incorporation/Registration of Entity	
7	Category opted for (Women/ ST/ SC/ Differently Abled/ Third gender/ Agri & Allied Graduate)	
8	Educational Qualification of Individual/Representative of Entity	
9	Passport size photograph of the Individual/ Representative of entity	
10	Local Address for Correspondence of the Individual/ Representative of entity	
11	Registered Address of Entity	
12	Main Office/Branch Address of Entity	
13	Phone no. of Individual/Representative of Entity	
14	Email Id of Individual/Representative of Entity	
15	AADHAR No. of Individual/Representative	
16	PAN of Individual/Representative of Entity, if available	
	Farmer Id of Individual, if available	
17	Registration No./ CIN of the Entity ³	
20	PAN/TAN of Entity	
21	GSTIN of Entity, if available	
22	Details of experience and exposure relevant to the proposed enterprise/project (family business, work experience, e- learning/certificate courses, trainings undertaken etc.)	

² Representative should be authorized by the board/governing body of the entity.

³ Registration document:

Groups (SHG/PG/: FPO: , Proprietorship firm: Registration Certificate under Shops & Establishment Act,
Partnership firm: Registration Certificate from IGR of state, Company (Pvt. Ltd., Public Ltd., LLP, OPC, FPC):
Certification of Incorporation, Cooperative/Federation: Certificate of Registration from Registrar of Cooperative
Societies, Society/Trust: Darpan Unique Id



2.2. Project Consultant Details

DPR prepared by:

Please provide further details of the consultant:





2.3. Concept and Scope of the Project

Background

Indian agriculture is undergoing a gradual shift from dependence on human power and animal power to mechanical power because increasing cost for upkeep of animal and growing scarcity of human labour. Further, use of mechanical power has a direct bearing on the productivity of crops apart from reducing the drudgery and facilitating timeliness of agricultural operations. Most of the farmers have no plenty of resource to purchase high-cost agricultural machineries/implements. Thus, there is a strong need for taking up Agro-Service Centers (ASC) a custom hiring centre of agricultural machineries/implements. It eventually caters the need of all categories of farmers for need based field operations.

ASCs are basically a unit comprising a set of farm machinery, implements and equipment meant for custom hiring by farmers. Though certain implements and equipment are crop specific, the traction units like tractors, power tillers etc., and self-propelled machinery like combine harvesters etc., are used in common. Therefore, an ideal model envisaged in this project comprise farm machinery that are commonly used for tillage operations for all crops, multi crop equipment and a minimum of crop specific machinery.

Market Potential

Mechanical power is largely consumed in big land holdings and is still beyond the reach of small/marginal holdings which constitutes around 70% of the total land holdings. This is due to the fact that the small/marginal farmers, by virtue of their economic condition are unable to own farm machinery on their own or through institutional credit. Therefore, to bring farm machinery facilities available within the reach of small/marginal holdings, collective ownership or Agro-Service Center needs to be promoted in a big way.

Need for Agro Service Center (ASC)

- To make available various farm machinery/ implement /equipment's to small and marginal farmers
- To offset the adverse economies of scale due to high cost of individual ownership
- To improve mechanization in places with low farm power availability
- To provide hiring services for various agricultural machinery/ implements applied for different operations.
- To expand mechanized activities during cropping seasons in large areas especially in small and marginal holdings.
- To provide hiring services for various high value crop specific machines applied for different operations.

Problems to be addressed.

The latest farm machinery, plant protection equipment's and post-harvest equipment's on custom hiring is being practiced in an unorganized way. This should reach the small and marginal farmers through organized agro service centres which to be established at the block level. Through these centres the small and marginal farmers would utilize farm machinery efficiently and economically to enhance the productivity of crops grown.



Potential for ASCs

The farm power availability for small/marginal land holdings is the lowest. As the small/marginal holdings constitutes around 70% of total land holdings, the potential for ASC which will cater to the farm machinery requirement of such a vast area, is quite huge. Subsidy schemes are also being formulated to encourage entrepreneurs and agri-graduates to set up ASC. Therefore, keeping in view the emphasis of agricultural farm machinery and the need for taking the of farm machinery within the reach of small/marginal farmers, institutional credit needs to be made available for ASCs.

Location of the ASCs

The ASC can be in a place where by and large small land holdings are located within a radius of 5 to 7 kms. This will reduce the transport cost and time of transport of agricultural machinery. In other terms, one ASC is expected to cater to 4-5 villages and therefore a common place equidistant from the villages catered is advisable.

Target Customers

Though institutions like Primary Agricultural Credit Societies, Multipurpose Societies, Marketing societies etc., and line departments have machinery for custom hiring, a vast area remains uncovered. Informal hiring systems are also prevalent in rural areas, however, timely availability is not assured. Therefore, there is a need to encourage individuals like progressive farmers, rural unemployed youth, agri-graduates etc., and village level institutions like SHG Federations, PGs, FPCs etc., to set up ASCs.

3. Techno-Commercial Assumptions

Sl. No.	Parameter	Value	Unit
1	Increase in Rate of Rent	5	%
2	Increase in fuel price	3	%
3	Collection from Debtors (First Year)	15	Days
4	Collection from Debtors	15	Days
5	Payable to Creditors	20	Days
6	Drawing By Promoter	10	%
7	Increase in Staff Salary	5	%
8	Rate of Interest on TL (11-3)% through AIF	8	%
9	Rate of Interest on WC	9	%
10	Loan Repayment (in year)	7	Years
11	Raw Material in Stock (on sales)	2	Days
12	Finished Goods in stock (on sales)	0	Days
13	Promoter's Contribution (Term Loan)	20	%
14	Promoter's Contribution (Working Capital)	20	%
15	Working Capital Requirement	10	Days
17	Working Capital Utilization	100	%
18	No of hours of Operation	8	Hrs
19	Cost of Operation of Tractor (40-45 PTO hp) hp	1089	Rs.



Sl. No.	Parameter	Value	Unit
	per Hr		
20	Cost of Operation of Combine Harvester per Hr	2885	Rs.
21	Cost of Operation of Tractor with Rotavator per Hr	1046	Rs.
22	Seed Drill		Rs.
23	Cost of Operation of Water Pump per Hr.	142	Rs.
24	Cost of Operation of Power Weeder per Hr	245	Rs.
25	Transplanter		Rs.
26	Power Tiller - 13 HP	1500	Rs.
27	Cost of Operation of Tractor with axial flow paddy thresher per hr.	1328	Rs.
28	Fuel Consumption per hr. by tractor	4.5	Ltrs/hr
29	Fuel Consumption per hr. combine harvester	7.5	Ltrs/hr
30	Fuel Consumption per hr. by pump	0.6	Ltrs/hr
31	Fuel Consumption per hr. by Power Weeder	0.7	Ltrs/hr
32	Rate of Diesel per lit	97	Rs.
33	Rate of Petrol per lit.	110	Rs.
34	Insurance on machinery	1	%

4. Financial Details

4.1. Project Fixed Capital

Sl. No.	Particulars	Unit	Qty.	Cost per unit (Rs)	Total (Rs)
A	Land				
1	Land Development	Sq. ft	0	0	0
2	Fencing (Barbed wire/Green Fencing)	ft	0	0	0
	Sub Total				0
B	Civil Construction				
1	A shed for keeping the tools and machinery	Sq. ft	1200	700	8,40,000
	Sub Total				8,40,000
C	Water Supply				
1	Water Supply with tank, pump, and pipeline				00.00
D	Electrification				
1	Electrical Installation (with transformer and DG Unit as required)				00.00

E	Plant & Machinery	Specification	Qty.	Unit Price (Rs)	Total (Rs)
Sl. No.	Particulars	Specification	Qty.	Unit Price (Rs)	Total (Rs)
1	Combine Harvester (self propelled)	Crawler type	1	28,00,000	28,00,000
2	Tractor	40-50 pto hp	1	9,00,000	9,00,000
3	Rotavator	5 to 6ft	1	1,30,000	1,30,000
4	Tractor trailer	4-ton capacity	1	1,60,000	1,60,000
5	Power weeder	3-8 hp	1	90,000	90,000
6	Pump set	3-5 hp	1	25,000	25,000



E Plant & Machinery					
Sl. No.	Particulars	Specification	Qty.	Unit Price (Rs)	Total (Rs)
7	Tractor operated axial flow Paddy Thresher	4-6 aspirator	1	2,35,000	2,35,000
	Total				43,40,000
F Miscellaneous Expenditure					
Sl. No.	Particulars	Specification	Qty	Unit Price	Total
1	Insurance premium of assets				43,400
2	DPR Cost				12,495
3	Other misc. exp				2,505
	Total Misc. Exp				58,400

4.2. Project Variable Expenses

Details of Recurring Expenditure						
Details of raw material						
Sl. No.	Items	Description	Operating Hrs	No of working days per year	Qty of fuel per annum (lit)	Amount (Rs)
1	Combine Harvester	Self-propelled (Diesel)	8	90	5,400	5,23,800
2	Tractor with Trailer	tractor drawn (Diesel)	8	120	4,320	4,19,040
3	Rotavator with tractor	Tractor drawn (Diesel)	8	90	3,240	3,14,280
4	Power weeder	Self-propelled (Diesel)	8	120	672	65,184
5	Pump set	Self-propelled (Diesel)	8	120	576	55,872
6	Tractor operated axial flow Paddy Thresher	Tractor propelled (Diesel)	8	60	2,160	2,09,520
	Total		48	600	13,632	13,78,176

Details of salary and other benefits				
Sl. No.	Type of workers	No. of Worker	Salary Per Month/head (Rs)	Total Salary per annum (Rs)
1	Machine operators	2	15,000	3,60,000
2	Labour/ helper	2	10,000	2,40,000
	Grand Total	4	25,000	6,00,000

4.2. Details of Sales

Details of Income



Details of Income						
Sl. No.	Particulars	Description	Operating Hrs per day	No of working days per year	Total working hours per year	Total (Rs)
1	Combine Harvester	Self-propelled (Diesel)	8	90	720	20,77,200
2	Trailer (Tractor + Trailer)	tractor drawn (Diesel)	8	120	960	10,45,440
3	Rotavator with tractor	Tractor drawn (Diesel)	8	90	720	7,53,120
4	Power weeder	Self-propelled (Diesel)	8	120	600	1,47,000
5	Pump set	Self-propelled (Diesel)	8	120	960	1,36,320
6	Tractor operated axial flow Paddy Thresher	Tractor drawn (Diesel)	8	60	480	6,37,440
Total			48	600	4,440	47,96,520



4.3. Project Balance Sheet

Liabilities	I	II	III	IV	V	VI	VII
Opening Capital	-	18,33,245	29,31,860	41,03,981	53,44,095	66,45,134	80,04,237
Add: Introduced	10,58,880						
Add: Profit	8,61,365	14,24,615	16,29,120	18,34,114	20,40,039	22,49,104	24,62,397
Less: Drawing	87,000	3,26,000	4,57,000	5,94,000	7,39,000	8,90,000	10,47,000
Closing Capital	18,33,245	29,31,860	41,03,981	53,44,095	66,45,134	80,04,237	94,19,634
Term Loan from Bank	37,25,350	32,21,355	26,75,528	20,84,398	14,44,205	7,50,875	-
Current Liabilities							
Cash Credit from Bank	44,800	44,800	44,800	44,800	44,800	44,800	44,800
Sundry Creditors	73,503	89,933	92,667	95,467	98,333	1,01,333	1,04,400
Expenses Payable	59,800	63,200	66,300	69,700	73,200	76,800	80,700
Current Provisions	1,05,966	3,42,692	4,30,337	5,18,192	6,06,445	6,96,044	7,87,456
Total Current Liabilities	2,84,069	5,40,626	6,34,104	7,28,158	8,22,779	9,18,978	10,17,356
Total Liabilities	58,42,664	66,93,841	74,13,613	81,56,651	89,12,117	96,74,090	1,04,36,990
Assets							
Fixed Assets	52,38,400	52,38,400	52,38,400	52,38,400	52,38,400	52,38,400	52,38,400
Less Depreciation	7,35,000	13,63,950	19,02,338	23,63,369	27,58,307	30,96,761	33,86,926
Net Fixed Assets	45,03,400	38,74,450	33,36,063	28,75,031	24,80,093	21,41,639	18,51,474
Current Assets							
Sundry Debtors	1,91,900	2,39,300	2,51,300	2,63,900	2,77,100	2,91,000	3,05,500
Inventories	7,400	9,000	9,300	9,600	9,900	10,200	10,500
Cash and Bank Balance	38,400	47,900	50,300	52,800	55,500	58,200	61,100
Other Current Assets	11,01,564	25,23,191	37,66,650	49,55,320	60,89,524	71,73,051	82,08,416
Total Current Assets	13,39,264	28,19,391	40,77,550	52,81,620	64,32,024	75,32,451	85,85,516
Total Assets	58,42,664	66,93,841	74,13,613	81,56,651	89,12,117	96,74,090	1,04,36,990



4.4. Calculation of Depreciation

Rates of Depreciation		10%	15%	Total depreciation for the year		
Year	1	84,000.00	6,51,000		7,35,000	
	2	75,600.00	5,53,350		6,28,950	
	3	68,040.00	4,70,348		5,38,388	
	4	61,236.00	3,99,795		4,61,031	
	5	55,112.40	3,39,826		3,94,938	
	6	49,601.16	2,88,852		3,38,453	
	7	44,641.04	2,45,524		2,90,165	

4.5. Projected P&L

Description	Year ending March 31st						
	I	II	III	IV	V	VI	VII
Capacity Utilisation	80	95	95	95	95	95	95
Revenue							
Sales	38,37,216	47,85,000	50,25,000	52,77,000	55,41,000	58,19,000	61,10,000
Total Income (A)	38,37,216	47,85,000	50,25,000	52,77,000	55,41,000	58,19,000	61,10,000
Expenditure							
Opening stock of Raw Material	-	7,400	9,000	9,300	9,600	9,900	10,200
Purchase (Net) of Material	11,02,541	13,49,000	13,90,000	14,32,000	14,75,000	15,20,000	15,66,000
Closing Stock of Raw material	7,400	9,000	9,300	9,600	9,900	10,200	10,500
Raw Material Consumption	10,95,141	13,47,400	13,89,700	14,31,700	14,74,700	15,19,700	15,65,700
Repair & Maintenance- Machinery (@5% of Cost)	52,384	55,100	57,900	60,800	63,900	67,100	70,500
Electricity expense	2,302	2,871	3,015	3,166	3,325	3,491	3,666
Insurance cost	43,400	45,600	47,900	50,300	52,900	55,600	58,400
Administrative salaries and wages	6,00,000	6,30,000	6,61,500	6,94,600	7,29,400	7,65,900	8,04,200
Other Misc Expenses [@1% of sales]	19,186	23,925	25,125	26,385	27,705	29,095	30,550
Total Cost	18,12,413	21,04,896	21,85,140	22,66,951	23,51,930	24,40,886	25,33,016
Profit Before Depreciation, Interest and Tax	20,24,803	26,80,104	28,39,860	30,10,049	31,89,070	33,78,114	35,76,984
Depreciation	7,35,000	6,28,950	5,38,388	4,61,031	3,94,938	3,38,453	2,90,165



Profit Before Interest and Tax	12,89,803	20,51,154	23,01,473	25,49,017	27,94,132	30,39,660	32,86,819
Interest on Term Loan	3,18,440	2,79,814	2,37,983	1,92,679	1,43,616	90,480	32,934
Interest on Working Capital Loan	4,032	4,032	4,032	4,032	4,032	4,032	4,032
Total Interest Paid	3,22,472	2,83,846	2,42,015	1,96,711	1,47,648	94,512	36,966
Profit Before Tax	9,67,331	17,67,308	20,59,458	23,52,306	26,46,484	29,45,148	32,49,852
Income Tax	1,05,966	3,42,692	4,30,337	5,18,192	6,06,445	6,96,044	7,87,456
Profit after Tax	8,61,365	14,24,615	16,29,120	18,34,114	20,40,039	22,49,104	24,62,397

4.6. Projected Cash Flow

Period Ending	I	II	III	IV	V	VI	VII
Cash & Bank Balance at Beginning	-	38,400	47,900	50,300	52,800	55,500	58,200
Cash Inflow during the Period	65,77,664	23,10,122	22,60,986	23,89,200	25,29,597	26,83,756	28,50,940
Cash Outflow during the Period	65,39,264	23,00,622	22,58,586	23,86,700	25,26,897	26,81,056	28,48,040
Closing Cash & Bank Balance	38,400	47,900	50,300	52,800	55,500	58,200	61,100

4.7. Projected Loan Repayment

Year	Interest	EMI	Principal
1	3,18,439.67	7,83,809.53	4,65,369.86
2	2,79,814.20	7,83,809.53	5,03,995.33
3	2,37,982.84	7,83,809.53	5,45,826.69
4	1,92,679.49	7,83,809.53	5,91,130.04
5	1,43,615.99	7,83,809.53	6,40,193.54
6	90,480.24	7,83,809.53	6,93,329.28
7	32,934.25	7,83,809.53	7,50,875.27
Total	12,95,946.68	54,86,666.68	41,90,720.00



4.8. Calculation of DSCR, IRR and BEP

Calculation of DSCR							
Year	I	II	III	IV	V	VI	VII
Net Sales	38,37,216	47,85,000	50,25,000	52,77,000	55,41,000	58,19,000	61,10,000
Net Profit	8,61,365	14,24,615	16,29,120	18,34,114	20,40,039	22,49,104	24,62,397
Interest Paid	3,22,472	2,83,846	2,42,015	1,96,711	1,47,648	94,512	36,966
Cash Accruals (a)	11,83,837	17,08,462	18,71,135	20,30,826	21,87,687	23,43,616	24,99,363
Principal	4,65,370	5,03,995	5,45,827	5,91,130	6,40,194	6,93,329	7,50,875
Interest	3,22,472	2,83,846	2,42,015	1,96,711	1,47,648	94,512	36,966
Total (b)	7,87,842						
DSCR	1.50	2.17	2.38	2.58	2.78	2.97	3.17
Average DSCR	2.51						

Calculation of Break-Even Point (BEP)							
Sales	38,37,216	47,85,000	50,25,000	52,77,000	55,41,000	58,19,000	61,10,000
Variable Cost	11,14,327	13,71,325	14,14,825	14,58,085	15,02,405	15,48,795	15,96,250
Contribution	27,22,889	34,13,675	36,10,175	38,18,915	40,38,595	42,70,205	45,13,750
Fixed Cost	17,55,558	16,46,367	15,50,717	14,66,609	13,92,111	13,25,057	12,63,898
BEP Sales	24,74,010	23,07,738	21,58,442	20,26,569	19,09,993	18,05,653	17,10,864
Average BEP sales	20,56,181						

Calculation of Internal Rate of Return (IRR)							
Sl. No.	Year		PAT	Depreciation	Cash Accrual		
	Cash outflow at beginning				-52,94,400		
1		31-03-2023	8,61,365	7,35,000		15,96,365	
2		31-03-2024	14,24,615	6,28,950		20,53,565	
3		31-03-2025	16,29,120	5,38,388		21,67,508	
4		31-03-2026	18,34,114	4,61,031		22,95,146	
5		31-03-2027	20,40,039	3,94,938		24,34,977	
6		31-03-2028	22,49,104	3,38,453		25,87,557	
7		31-03-2029	24,62,397	2,90,165		27,52,562	
IRR			34.15%				
Payback Period			2 Years 9 Months				



4.9. Summary of Project Cost

Sl. No.	Name of Assets	Amount (INR)
1	Land Development	-
2	Civil Construction	8,40,000
3	Irrigation/Water Supply	-
4	Electrification	-
5	Plant & Machinery	43,40,000
6	Livestock	-
7	Insurance	43,400
8	DPR Cost	12,495
9	Other misc. exp	2,505
Total Fixed Cost		52,38,400
Recurring		56,000
Cost of Project		52,94,400